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BACKMAKERS, BRICKLAYERS, &c.

By ISAAC OVERLEY, *Teacher*
of the MATHEMATICS.

U S U S P E R F I C I T.

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By Isaac Overton Loomis

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T H E
P R E F A C E.

AS the Mathematics is the most sublime of Studies, so the most useful Parts thereof, are those two great Wings, Arithmetic and Geometry, on which we are born through more lofty Speculations, and trace all Nature by a demonstrative Certainty.

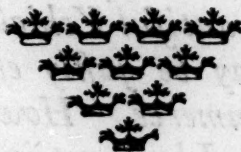
By help of Arithmetic, the industrious Merchant transacts a great deal of Business, without oppressing the Memory: By help of Geometry, the skilful Builder truly delineates the Proportion of every Part of that most beautiful Vehicle a Ship; so that those two, may be justly esteem'd the Supporters of Commerce. However, in the following Tract, I have not inserted any Arithmetical Rudiments, as intending it for those who have no farther Knowledge therein, than of Addition and Subtraction; by help

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of which, all Propositions herein are performed, and have only inserted those Parts of Geometry, which are necessary for the Mensuration of Superficies and Solids; as having designed it for the Use of Carpenters, Joyners, Glaziers, Painters, Plasterers, Plumbers, &c.

I shall say no more, but only add, that the Invention is new, and the Operation is easy and expeditious, and adapted to those, whose Time or Capacity admits no farther Improvements, than heretofore spoke of; for the Use of whom only, the following Treatise was composed by their well Wisher,

I. OVERLEY.



M E A-



MEASURING

M A D E

E A S Y, &c.

CHAP. I.

DEFINITIONS.

I.  Point, is that which hath no Extent, *viz.* neither Length, Breadth, nor Depth, and therefore indivisible.

II. A Line, is that which hath Length, but neither Breadth, nor Depth, and its Terms are Points.

III. A Superficies, is that which hath Length and Breadth, but no Depth, and its Terms are Lines.

IV. A Solid, is that which hath Length, Breadth and Depth, and its Terms are Superficies.

V. A

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V. A right Line, is the shortest, which can be drawn between any two Points.

VI. A Figure, is an Extent, or Space, shut in on every Side, by one or more Terms.

VII. An Angle, is the meeting of any two Lines in one Point.

Geometrical PROBLEMS.

PROBLEM I.

Plate 1. *To raise a Perpendicular in the Middle of a Line.*
Fig. 1.

ON each End of the Line AB , with your Compasses opened at Pleasure, draw two Arches, intersecting themselves on each Side the Line. The Line drawn through the Points of Intersection, as CD , shall be perpendicular, and bisect the Line AB .

PROB. II.

Plate 1. *To let fall a Perpendicular from a given Point, to the Middle of a Line.*
Fig. 1.

On the given Point C , describe an Arch cutting the Line AB in two Points, and then proceed as before, to find the Point D , the Line CD being drawn, shall be perpendicular.

PROB. III.

Plate 1. *To raise a Perpendicular on the End of a Line.*
Fig. 2.

On the End of the given Line at B , with your Compasses opened at Pleasure, describe an Occult Arch, with
the

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the same Distance between your Compasses, lay the Distance on the said Arch, from *D* to *C*, through which Point *C*, draw the Line *DE*; repeat the Distance *DC*, from *C* to *E*, from *E* draw the Line *EB*, and it shall be perpendicular.

PROB. IV.

To let fall a Perpendicular on the End of a Line.

Plate 1.
Fig. 2.

From the given Point *E*, draw a Line at Pleasure to cut the Line *AB* in *D*, divide this Line in two equal Parts, by Prob. 1. in *C*: On this Point *C*, with the Distance *CE*, or *CD*, describe the Arch *EBD*, so shall *B* be the Point, to which you are to draw the Perpendicular *EB*.

PROB. V.

To draw a Line parallel to a given Line at a given Distance.

Plate 1.
Fig. 3.

On the Line given on any two Points *A* and *B*, with the given Distance *E* between your Compasses, describe two occult Arches, and over these Arches draw the Line *CD* exactly touching them, and it's done.

PROB. VI.

To describe an Angle of any Quantity.

Plate 1.
Fig. 4.

On the Angular Point *A*, with the Chord of Sixty Degrees, taken from the Sector, between your Compasses describe the Arch *BC*, on this Arch lay the Chord of the Angle desired, (admit 30 Deg.) to the Point *C*, draw the Line *CA*, and it's done.

PROB.

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PROB. VII.

Plate 1.
Fig. 4. *To measure a given Angle.*

With the Chord of 60 Degrees as before, describe an Arch, to cut the containing Sides in *B* and *C*; take this Distance *BC* between your Compasses, and lay it on the Line of Chords on the Sector, and it shall shew the Quantity of the Angle given.

PROB. VIII.

Plate 1.
Fig. 5. *To bisect an Angle given.*

With any Distance between your Compasses, on the Point *A*, describe the Arch *EF*, on the Points *E* and *F* describe two Arches, intersecting themselves in *G*, so shall the Line *AG* divide the given Angle in two equal Parts.

PROB. IX.

Plate 1.
Fig. 6. *To describe an Angle equal to an Angle given.*

Let the Angle given be *A*, first draw the Side *EF*, equal to the Side *CD*, on *C* at pleasure describe the Arch *DG*, with the same Distance on *E* describe the Arch *FH*, take the Distance *DG*, and lay it from *F* to *H*, draw the Line *HE*, and the Angle *B* shall be equal to the Angle *A*.

PROB. X.

Plate 1.
Fig. 7. *To divide a Line into any Number of equal Parts.*

Let the Line given to be divided into four equal Parts be *E*, on the Line already divided *AB* with one Foot
of

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of the Compasses on *A*, on the other End *B* describe an Arch; take the Line *E* between your Compasses and lay it from *B* to *C*, and draw the Line *AC*; lay the first divided Part of the Line *AB* on *AC*, so shall the Distance *DF* divide the Line *E* into four equal Parts,

PROB. XI.

To divide a Line according to a Line given.

Plate 1.

Fig. 7.

Admit the Line *E* to be divided as *AB*, after having set the Line *E* on the Arch as before, take the Distances *DF*, *GH*, *IK*, and lay them on the Line *E* from the End thereof, and it shall be divided as required.

PROB. XII.

To find a mean Proportional between two Lines.

Plate 1.

Fig. 8.

Take the two Lines given, *A* and *B*, and join them in a right Line; on the Centre thereof describe a Semicircle, then on the Point of Conjunction *C* erect a Perpendicular to the Semicircle, that Line is the mean Proportional.

PROB. XIII.

To divide a Line by extreme and mean Proportion.

Plate 1.

Fig. 9.

Let the Line given be *A*, draw the Line *AC*, and with *A* between your Compasses, describe the Semicircle *AD*; *C*, erect a Perpendicular from *B* to cut the Semicircle in *D*; divide *BC* in two equal Parts at *F*, then setting one Foot of your Compasses at *F*, with t'other extended to *D*, describe the Arch *DI*, then is the Line *AB* divided by extreme and mean Proportion; viz. *AI* hath the same Proportion to *IB* that *IB* hath to *AB*.

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PROB. XIV.

Plate 1. To find two mean Proportionals between two Lines.
Fig. 10.

Draw the Line CD of a sufficient Length, and on the End thereof D , raise a Perpendicular DE , lay the given Line A , from D to F , and the given Line B , from D to G . Draw a Line from F to G , and find the Middle thereof H , on H , with the Distance HF , describe a Semicircle; lay DF thereon from G to I , thro' that Point I draw a Line which may cut the Lines DB , DC , equally distant from the Centre H , so shall CG and FE , be two mean Proportionals.

PROB. XV.

Plate 1. To two Lines given to find a third Proportional.
Fig. 11.

Let the two Lines given be A and B ; draw the Line CD equal to B , and on the End at D erect a Perpendicular DE ; let CF be made equal to A , and at F erect the Perpendicular FG , and lay B from F to G ; then through G draw the Line CGE , to cut the longest Perpendicular in E , so shall DE be the third Proportional.

PROB. XVI.

Plate 1. To three Lines given to find a fourth Proportional.
Fig. 12.

Let the Lines given be ABC , draw EF equal to C , and make EG equal to A , on G and F erect Perpendiculars; lay B on the lesser Perpendicular from G to H ; thro' H draw EH , to cut the greatest Perpendicular I , so is FI the fourth Proportional.

PROB.

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PROB. XVII.

Having three Points given, not in a right Line, to draw a Circle through them. Plate 1.
Fig. 13.

Let the three Points given be ABC , with your Compasses opened at Pleasure, with one Foot in C , describe an Arch on each Side the Circle to be drawn, with the same Distance, and one Foot in A cross those Arches; on the Points A and B do the same, draw two Lines DE and FE , through those Intersections, and they shall meet in the Point E , which is the Centre of the Circle required.

PROB. XVIII.

Having three Sides given to describe a Triangle. Plate 1.
Fig. 14.

Let the Sides given be ABC , draw DE , equal to C , with the Line B between your Compasses, and one Foot in D describe an Arch, with the Line A between your Compasses, and one Foot in E cross that Arch; so the Lines drawn from D and E , to the Intersection F , shall describe the Triangle.

PROB. XIX.

Having the Side of a Square to describe it. Plate 1.
Fig. 15.

On the Side given, AB , at B erect a Perpendicular BC , of the same Length as AB , with the Distance AB between your Compasses, and one Foot on A describe an Arch, with the same Distance, and one Foot on C cross that Arch at D , draw Lines to D from A and C , and it's done.

PROB. XX.

Plate 1. To describe a regular Polygon.
Fig. 16.

There are different Manners to describe different Polygons; but I shall give one general Rule.

Draw an Occult Circle to contain the Polygon desired, admit a Pentagon, or Figure, of five Sides; divide the Diameter into as many Parts, (*viz.* five,) and with the Diameter between your Compasses, with one Foot on *A*, describe an Arch with the same Distance, and one Foot on *B*, cross that Arch at *C*, draw a Line from *C* thro' the second Division of the Diameter, to cut the Circle in *D*, so is *AD* the Side of the Pentagon required.

PROB. XXI.

Plate 1. To make a Square equal to divers Squares.
Fig. 17.

Let the Sides of the Squares given be, *AB C*, draw a Line of sufficient Length *D E*, on the End at *E* raise a Perpendicular; set *A* from *E* to *F*, and *B* from *E* to *G*, draw *G F*, now is *G F* the Side of a Square equal to *A* and *B*; therefore take the Distance *G F*, and set from *E* to *H*, and take *C* and set it from *E* to *I*, so is *H I* the Side of a Square, equal to the three Squares *AB* and *C*.

PROB. XXII.

Plate 1. To make a Circle equal to divers Circles.
Fig. 17.

Take the Diameters of the given Circles, and proceed as in the last Problem, so will *H I* be the Diameter of a Circle equal to three Circles, whose Diameters are *AB* and *C*.

N. B. Altho' the following Tables are calculated to eight Places, nevertheless the five first are sufficient for Use, which will abate much of the Work.



CHAP. II.

of SUPERFICIES.

Having the Diameter of a Circle, to find the Circumference.

TO the Logarithm of the Diameter add 04971509, and the Sum is the Logarithm of the Circumference (*Plate 2. Fig. 1.*) let the Diameter *A* be twelve Feet four Inches.

Log. of *A* 10910805
Add 04971509

Log. of Circumference 15882314

In the Table of Logarithms against 15882314, I find 38 Feet 9 Inches, the Circumference *B C D E*.

N. B. That when you can't find the exact Logarithm, take the nighest thereto.

Having the Circumference to find the Diameter. Plate 2. Fig. 1.

From the Logarithm of the Circumference, substract the Log. 04971509, the Remainder is the Log. of the Diameter.

Circum. 38 F. 9 In. Log. 15882718
Sub. 04971509

Diameter 12 F. 4 In. Log. 10911209

Having

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Plate 2. *Having the Diameter to find the Content.*
Fig. 1.

From double the Logarithm of the Diameter, subtract
01049091, the Remainder is the Log. of the Content.

Diameter 12 F. 4 In.	Log.	10910805
		<u>10910805</u>
		21821610
	Sub.	<u>01049091</u>

Content 119 F. 6 In. Fere	<u>20772519</u>
---------------------------	-----------------

Plate 2. *Having the Circumference to find the Content.*
Fig. 1.

From double the Logarithm of the Circumference,
subtract 10992109, the Remainder shall be the Loga-
rithm of the Content.

Circumfer. 38 F. 9 In.	Log.	15882718
		<u>15882718</u>
		31765436
	Sub.	<u>10992109</u>

Content 119 F. 6 In. Log.	<u>20773327</u>
---------------------------	-----------------

Plate 2. *Having the Content of a Circle, to find the Side
Fig. 2. of a Square equal.*

Take half the Logarithm of the Content, it shall be
the Logarithm of the Side of the Square equal.

Content 182 F. 3 In.	Log.	22606676
		<u>22606676</u>
Side of Square 13 F. 6 In.	Log.	<u>11303338</u>

Having

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Having the Diameter, to find the Side of the Plate 2.
inscribed Square. Fig. 3.

From the Logarithm of the Diameter, substract
01505151, the Remainder is the Logarithm of the Side.

Diameter 12 F. 4 In. Log. 10910805
Sub. 01505151

Side of inscribed Square 8 F. 9 In. 09405654

Having the Side of a Square, to find the Content. Plate 2.
Fig. 4.

Double the Logarithm of the Side, is the Logarithm
of the Content.

Side of Square 10 F. 4 In. Log. 10142405
10142405

Content 106 F. 9 In. Log. 20284810

Having the Length and Breadth of an Oblong, Plate 2.
to find the Content. Fig. 5.

Add the Logarithm of the Length to the Logarithm
of the Breadth, the Sum is the Logarithm of the Con-
tent.

Length 36 F. 3 In. Log. 15593081
Breadth 12 F. 1 In. Log. 10821868

Content 438 F. 0. In. Log. 26414949

To find the Content of a Triangle. Plate 2.
Fig. 6.

Add the Logarithm of the Base to the Logarithm of
the Perpendicular; let fall from the opposite Angle, to
the

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the Base, the Sum is the Logarithm of double the Content.

Base AB , 29 F. 7 In. Log. 14710472

Perp. CD , 14 F. 9 In. Log. 11687921

F. In.

436: 4 Log. 26398393

Content 218: 2

Plate 2. *To find the Content of a Rhombus.*

Fig. 7.

Let fall a Perpendicular from one of the obtuse or widest Angles, to the opposite Side; add the Logarithm of that Perpendicular to the Logarithm of the Side, the Sum is the Logarithm of the Content.

Side AB , 24 F. 9 In. Log. 13935752

Perp. AC , 16 F. 6 In. Log. 12174840

Content 408 F. 4 In. Log. 26110592

Plate 2. *To find the Content of a Rhomboides.*

Fig. 8.

Add the Logarithm of the Length to the Logarithm of the Perpendicular, the Sum is the Logarithm of the Content.

Length AB , 36 F. 0 In. Log. 15563025

Perp. CD , 10 F. 5 In. Log. 10177288

Content 375 F. 0 In. Log. 25740313

Plate 2. *To find the Content of a Trapezium.*

Fig. 9.

Having a Trapezium, or Figure, of four unequal Sides given, to find the Content: Do thus, draw the Diagonal AB , let fall the Perpendiculars CD and FE , add the Logarithm

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Logarithm of the Diagonal, to the Logarithm of the Sum of both Perpendiculars, the Sum is the Logarithm of double the Content.

	F.	In.	
Diagonal <i>AB</i> ,	30	: 0	Log. 14771213
Perp. <i>CD</i> ,	9	: 6	
Perp. <i>FE</i> ,	15	: 7	

Sum of Perp. 25 : 1 Log. 13993853

28765066

Sub. Log. of 2 03010300

Cont. 376 : 3 25754766

N. B. When the Logarithm of the double Content is given, subtract the Logarithm of two Feet, gives the Logarithm of the Content as above.

To find the Content of a regular Polygon.

Plate 2.

Fig. 10.

Let fall the Perpendicular *AB*, from the Center to the Middle of one Side; then add the Logarithm of *AB*, to the Logarithm of half the Sum of the Sides, and the Sum is the Logarithm of the Content.

Perp. *AB*, 3 F. 11 In. Log. 05929166

Half Sum of Sides 13 F. 6 In. Log. 11303338

Content 52 F. 11 In. Log. 17232504

To find the Content of an irregular Polygon, or Figure, of several unequal Sides.

Plate 2.

Fig. 11.

Divide the given Polygon into several Triangles, find the Content of each as was before taught, collect all the Contents

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Contents into one Sum, it shall be the Content of the whole.

		F.	In.
Triangle	$\left\{ \begin{array}{l} A B F \\ B C F \\ F C E \\ C D E \end{array} \right.$	40	8
		21	7
		54	6
		22	4
Total Content		139	1

Plate 2. *To find the Content of an Ellipsis, or Oval.*
Fig. 12.

Add the Logarithms of the Length and Breadth together, from the Sum subtract 01049091, the Remainder is the Logarithm of the Content.

Length AB , 22 F. 4 In. Log. 13489536

Breadth CD , 15 F. 6 In. Log. 11903317

25392853

01049091

Content 271 F. 10 In. Log. 24343762

Plate 2. *To find the Content of a Parabola.*
Fig. 13.

Add the Logarithm of the Base AB , to the Logarithm of the Height CD , and from the Sum subtract 01760912, the Remainder is the Logarithm of the Content.

Height DC , 19 F. 0 In. Log. 12787536

Base AB , 17 F. 4 In. Log. 12388821

25176357

01760912

Content 219 F. 7 In. Log. 23415445

Note,

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Note, If at any Time the Logarithm of the Content in Feet, exceeds the greatest Logarithm in the Table, subtract the Logarithm of 9, it shall give the Content in Yards.

Suppose an Oblong, whose Length is 98 Feet, and Breadth 25 Feet 7 Inches, what's the Content.

Length 98 F. 0 In. Log. 19912261
Breadth 25 F. 7 In. Log. 14079572

33991833
Sub. 9 F. 0 In. Log. 09542425

Cont. Yards 278 $\frac{7}{8}$ 24449408





CHAP. III.

DEFINITIONS.

I.  Cube, is a Figure contain'd in six equal Squares, as a Die.

II. A Prism, is a Figure, contain'd under several Plains, and its Bases are parallel and equal, such is a Joist, &c.

III. A Cylinder, is a Figure, whose Bases are circular, parallel, and equal, as a Rolling-Stone.

IV. A Pyramid, is a Figure, whose Sides are plain Triangles, arising from the Base, and meeting in one Point, which is called the Vertex, such are some Spires.

V. A Cone, is a Figure (whose Base is a Circle) arising to a Vertex, such is a Sugar Loaf.

VI. A Sphere, is a round Figure, whose Surface is every where equally distant from the Center, as a Bullet.

VII. A Spheroid, is a solid Figure, representing an Egg, and is form'd by a Semi-elipsis, turn'd round on its longest Diameter.

VIII. A Parabolick Conoid, is a Figure, form'd by a Semi-parabola, turn'd round upon its Axis.

Of SOLIDS.

Plate 3.

To find the Content of a Cube.

Fig. 1.

THrice the Logarithm of the Side, is the Logarithm of the Content.

Side

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Side AB , 5 F. 8 In. Log. 07533277

3

Content 181 F. 11 In. - Log. 22599831

To find the Content of a Parallelepipedon.

Plate 3.

Fig. 2.

Add together the Logarithms of the Length, Breadth, and Depth, the Sum is the Logarithm of the Content.

Length DB , 12 F. 3 In. Log. 13881361

Breadth AC , 3 Feet. Log. 04771212

Depth AD , 7 F. 1 In. Log. 08502377

Content 260 F. 3 In. Log. 24154950

To find the Content of any Prism.

Plate 3.

Fig. 3.

To the Logarithm of the Content of the Base, add the Logarithm of the Length, the Sum is the Logarithm of the solid Content.

Perp. IH , 3 F. 11 In. Log. 05929166

Half Sum of Sides 13 F. 6 In. Log. 11303338

Superficial Cont. of $BACFED$, 17232504

Length 8 F. 2 In. Log. 09120449

Solid Content 431 F. 9 In. Log. 26352953

To find the Content of a Cylinder.

Plate 3.

Fig. 4.

To double the Logarithm of the Diameter, add the Logarithm of the Length, and from that Sum subtract

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stract 01049091, the Remainder is the Logarithm of the Content.

Diam. AB , 7 F. Log. 08450981

2

16901962

Length AC , 8 F. Log. 09030900

25932862

Sub. 01049091

Content 307 F. 10 In. Log. 24883771

If your Cylinder is taken in Inches subtract 33424529.

To find the Content of a Pyramid.

To the Logarithms of the Dimensions of the Base (before taught) add the Logarithm of the Altitude, from that Sum subtract the Logarithm of 3, the Remainder is the Logarithm of the Content.

Admit a Pyramid, whose Base is Square (*Fig. 5*) the Side of its Base AB , 6 F. 4 In. and Height CD , 16 F. 7 In. I demand the solid Content.

Side AB , 6 F. 4 In. Log. 08016324

08016324

Content of Base Log. 16032648

Height CD , 16 F. 7 In. Log. 12196719

28229367

Sub. Log. of 3 F. 04771212

Content 221 F. 9. In. Log. 23458155

To find the Content of a Cone.

Plate 3.

Fig. 6.

To

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To double the Logarithm of the Diameter of the Base, add the Logarithm of the Height; and from the Sum subtract 05820303, the Remainder is the Logarithm of the Content.

$$\begin{array}{r}
 \text{Diam. } AB, 7 \text{ F. Log. } 08450981 \\
 \phantom{\text{Diam. } AB, 7 \text{ F. Log. }} 08450981 \\
 \text{Height } CD, 8 \text{ F. Log. } 09030900 \\
 \hline
 \phantom{\text{Diam. } AB, 7 \text{ F. Log. }} 25932862 \\
 \text{Sub. Log. } 05820303 \\
 \hline
 \text{Content } 102 \text{ F. } 7 \text{ In. Log. } 20112559 \\
 \hline
 \end{array}$$

To find the Content of a Sphere.

Plate 3.
Fig. 7.

From thrice the Logarithm of the Diameter, subtract 02808266; the Remainder is the Logarithm of the Content.

$$\begin{array}{r}
 \text{Diam. } AB, 3 \text{ F. } 9 \text{ In. Log. } 05740313 \\
 \phantom{\text{Diam. } AB, 3 \text{ F. } 9 \text{ In. Log. }} 3 \\
 \hline
 \text{Treble Log. } 17220939 \\
 \phantom{\text{Treble Log. }} 02808266 \\
 \hline
 \text{Cont. } 27 \text{ F. } 7 \text{ In. Log. } 14412673 \\
 \hline
 \end{array}$$

To find the Content of a Spheroid.

Plate 3.
Fig. 8.

To twice the Logarithm of the shortest Diameter, add the Logarithm of the longest, and from the Sum subtract the Logarithm 02808266; the Remainder is the Logarithm of the Content.

Diam.

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Diam. *CD*, 4 F. 2 In. Log. 06197888

06197888

Diam. *AB*, 7 F. 5 In. Log. 08702088

21097864

02808266

Cont. 67 F. 5 In. Log. 18289598

Plate 3. To find the Content of a Parabolick Conoid.
Fig. 9.

To double the Logarithm of the Diameter of its Base, add the Logarithm of the Height, and from the Sum subtract 04059391; the Remainder is the Logarithm of the Content.

Diameter *AB*, 2 F. 4 In. Log. 03679768

03679768

Height *CD*, 3 F. 3 In. Log. 05118834

12478370

Sub. Log. 04059391

Content 6 F. 11 In. Log. 08418979

To find a Cube equal to any Solid.

Take the Third of the Logarithm of the Content, it shall be the Side of the Cube equal.

Suppose a Sphere whose Content is 463 F. 3 In. what is the Side of a Cube equal.

463 F. 3 In. Log. 3) 26658155

Side of Cube equal 7 F. 9 In. 08886051

Note,

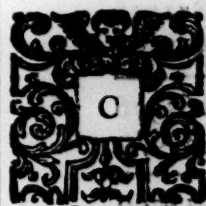
MEASURING *made* EASY, &c. 25

Note, If the Dimensions are taken in Inches and Parts, the Content is given in Inches and Parts, as in the last Problem : If the solid Content was 463 Inches and three Parts, the Side of the Cube would be 7 Inches and 9 Parts.



CHAP. IV.

PRACTICAL QUESTIONS.



Arpenters measure their Work by the Square, therefore having found the Content in Feet, cut off 2 Figures to the Right Hand ; or otherwise, from the Logarithm of the Content in Feet, subtract the Logarithm of 100 ; the Remainder is the Logarithm of the Content in Squares, and the Inches in the Column is so many Times eight Feet four Inches.

EXAMPLE.

A Floor 57 F. 3 In. long, and 28 F. 6 In. broad, I demand the Content in Squares.

57 F. 3 In. Log. 17577755
28 F. 6 In. Log. 14548449

32126204
Log. of 100 F. Sub. 20000000

16 F. 4 In. Log. 12126204

D

There

26 MEASURING *made* EASY, &c.

Therefore the Content is 16 Squares, and four Times 8 F. 4 In. which is 33 Foot 4 Inches.

Bricklayers measure their Work by the Rod, but Tyling by the Square, as the Carpenters, therefore the same Method is used ; but to measure Brick-Work do thus : Add the Logarithms together, as before taught ; and from the Sum subtract the Logarithm of 272 F. 3 In. the Remainder is the Logarithm of the Content in Rods, and the Inches are so many Times 22 Feet 8 Inches.

EXAMPLE.

A Wall 437 F. 9 In. long, and 12 F. 2 In. high, what's the Content in Rods.

Highth 12 F. 2 In.	Log.	10851716
Length 437 F. 9 In.	Log.	26412262

Sub. 272 F. 3 In.	Log.	37263976
		24349679

19 Rods, 158 F.	12914299
-----------------	----------

JOyners measure their Work by the Yard, therefore from the Sum of the Logarithm, subtract the Logarithm of 9 ; the Remainder is the Logarithm of the Content in Yards, and the Inches are so many Times 3 Inches.

EXAMPLE.

A Room of Wainscot is 126 F. 3 In. in Compass, and 13 F. 9 In. high, what's the Content in Yards ?

126 F.

MEASURING *made* EASY, &c. 27

126 F. 3 In. Log. 21012314

13 F. 9 In. Log. 11383027

32395341

Sub. 9 F. Log. 09542425

Cont. 192 Yards, 30 In. 22852916

Painters Work is measured in the like Method as Joiners.

Glaziers measure their Work by the Foot square, therefore the Logarithms added together, give the Logarithm of the Content.

EXAMPLE

A Window 3 Feet 11 Inches high, and 4 F. 11 Inches long, what's the Content?

3 F. 11 In. Log. 05929166

4 F. 11 In. Log. 06916708

Cont. 19 F. 3 In. Log. 12845874

Round Timber is usually measured by taking the Girt in the Middle, and taking the fourth Part thereof for the Side of a Square equal, (tho' the just Way is to measure it as a Cylinder;) therefore to double the Logarithm of a fourth of the Girt, add the Logarithm of the Length, the Sum is the Logarithm of the solid Content.

A Piece of Timber whose Girt is 10 F. 0 In. and Length 36 F. 6 In. what's the Content?

2 F. 6 In.

28 MEASURING made EASY, &c.

F. In.	
2 : 6 fourth Part. Log.	} 03979400 03979400
36 : 6 Length. Logarithm	
	15622929
228 : 1 Content. Logarithm	23581729

Here the true Content, as a Cylinder, is 290 F. 6 In.

GAUGING.

TO gauge any Figure, find, by the former Rules, the Logarithm of the solid Content, and add thereto 07872934, it shall give the Content in Gallons and twelfth Parts; or subtract 07690079, it shall give the Content in Barrels and twelfth Parts, if your Dimensions are taken in Feet and Inches; but if they are taken in Inches and Parts, subtract 24502491 for Gallons, and 4006516 for Barrels.

EXAMPLE I.

A Cooler, whose Length is 222 Inches, and Breadth 124 Inches, and Depth 9 Inches, what's the Content in Barrels?

222 In. Log.	23463530
124 In. Log.	20934217
9 In. Log.	09542425
	<u>53940172</u>
	Sub. 4006516

Content 24 Bar. $\frac{1}{2}$ or 15 Gal. 13874656

EXAM.

MEASURING *made* EASY, &c. 29

EXAMPLE II.

A Cube, whose Side is 2 F. 7 In. what's the Content in Gallons?

Log. of 2 F. 7 In. Side 04121805
3

Solid Content 12365415
07872934

Content Gall. 105 $\frac{1}{2}$ Log. 20238349

EXAMPLE III.

A Cylinder, whose Diameter is 7 F. 0 In. and Length 8 F. 0 In. what's the Content in Barrels?

Diam. 7 F. 0 In. Log. } 08450981
08450981
Length 8 F. 0 In. Log. 09030900

25932862
Sub. 01049091

24883771
Sub. 07690079

Cont. Bar. 52 $\frac{4}{5}$ Log. 17193692

Here more Examples are needless.

CASK GAUGING,

TAKE out the Inches and Parts, agreeing to the Difference of Diameters, from the following Table, and add it to the lesser Diameter, it shall be the mean

50 MEASURING *made* EASY, &c.

mean Diameter ; to double the Logarithm of this Mean, add the Logarithm of the Length ; and from the Sum subtract the Logarithm of 359 for Beer Gallons, or 294 for Wine Gallons, or subtract 41114573, it is the Content in Barrels.

EXAMPLE I.

A Cask, whose Head Diameter is 25 Inches, Bung 31 Inches, and Length 46 Inches, what's the Content in Gallons and Barrels ? The Difference of Diameters is 6 Inches, against 6 in the Table on the Left Hand, is 4 In. 1 Part, which added to the lesser Diameter, makes 29 In. 1 Part, the mean Diameter.

Log. of mean Diam. 29 In. 1 Part } 14636442
14636442

Log. of Length, 46 In. 0 Part 16627579

Sub. Log. of 359 45900463
25550945

Log. of Cont. 108 Gal. $\frac{4}{12}$ 20349518

Sub. 45900463
41114573

Log. of Cont. 3 Bar. 04785890

N. B. By the like Method is a Cylinder gaug'd.



TABLE

A TABLE to find the Mean DIAMETER.

Inches	0	1	2	3	4	5	6	7	8	9	10	11
1	0	8	0	9	0	10	0	1	1	2	1	3
2	1	4	1	5	1	1	8	1	1	10	1	0
3	2	0	2	1	6	4	1	9	6	6	1	8
4	2	9	2	2	2	2	4	2	2	3	4	4
5	3	5	3	3	3	3	3	3	1	11	0	1
6	4	2	4	7	4	5	6	6	7	8	9	6
7	4	4	11	4	1	2	2	10	4	4	4	9
8	5	7	4	0	9	10	11	3	0	1	5	3
9	6	3	5	9	5	7	8	6	9	6	2	6
10	7	0	7	2	6	4	6	7	7	10	7	11

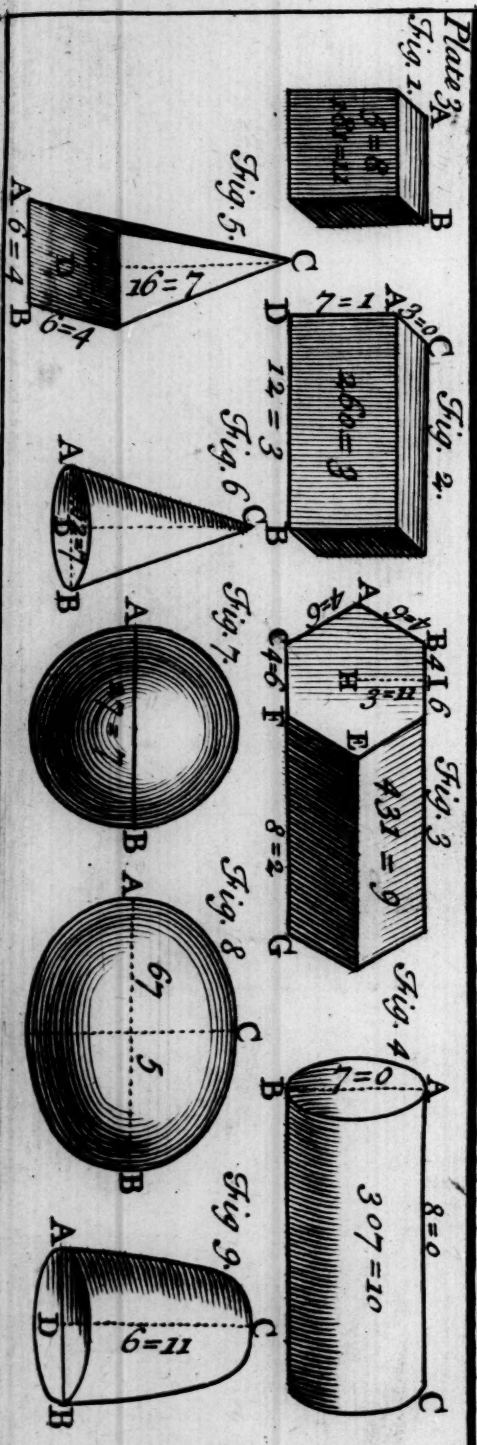
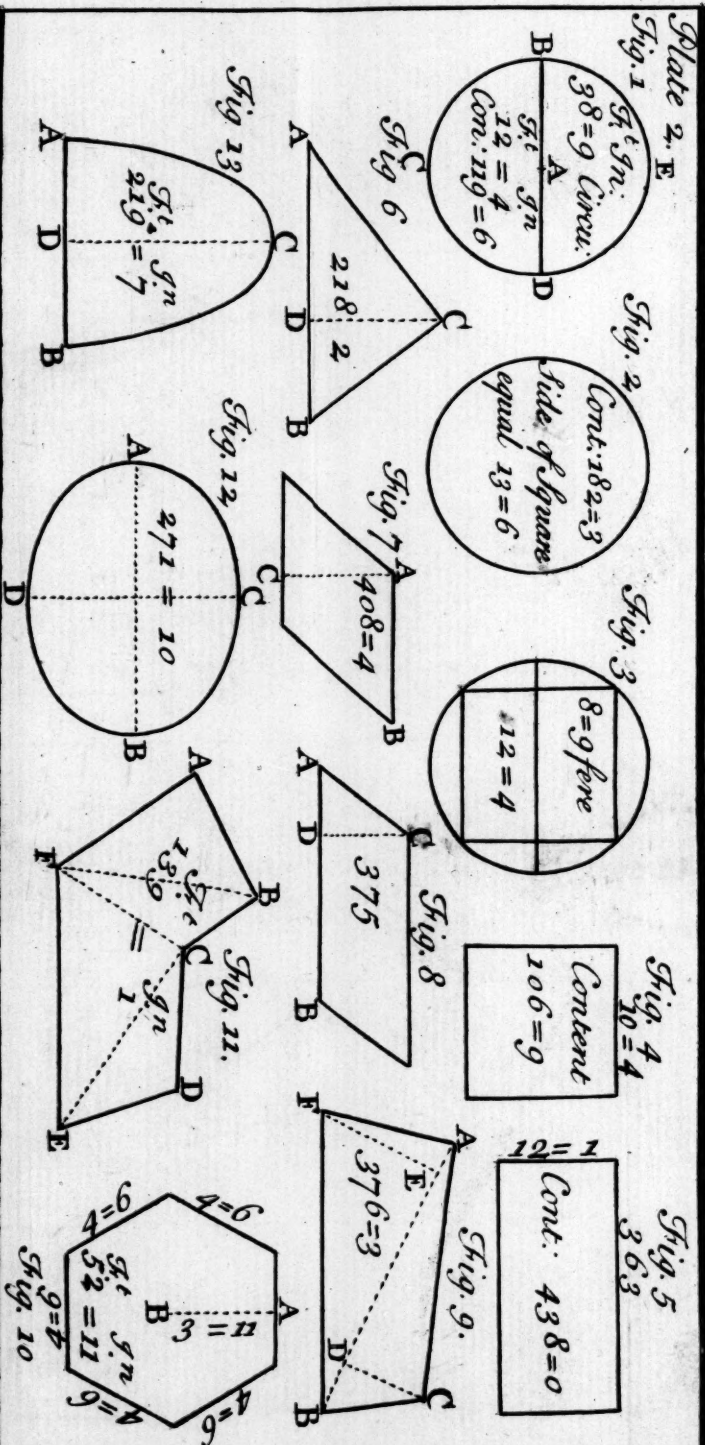
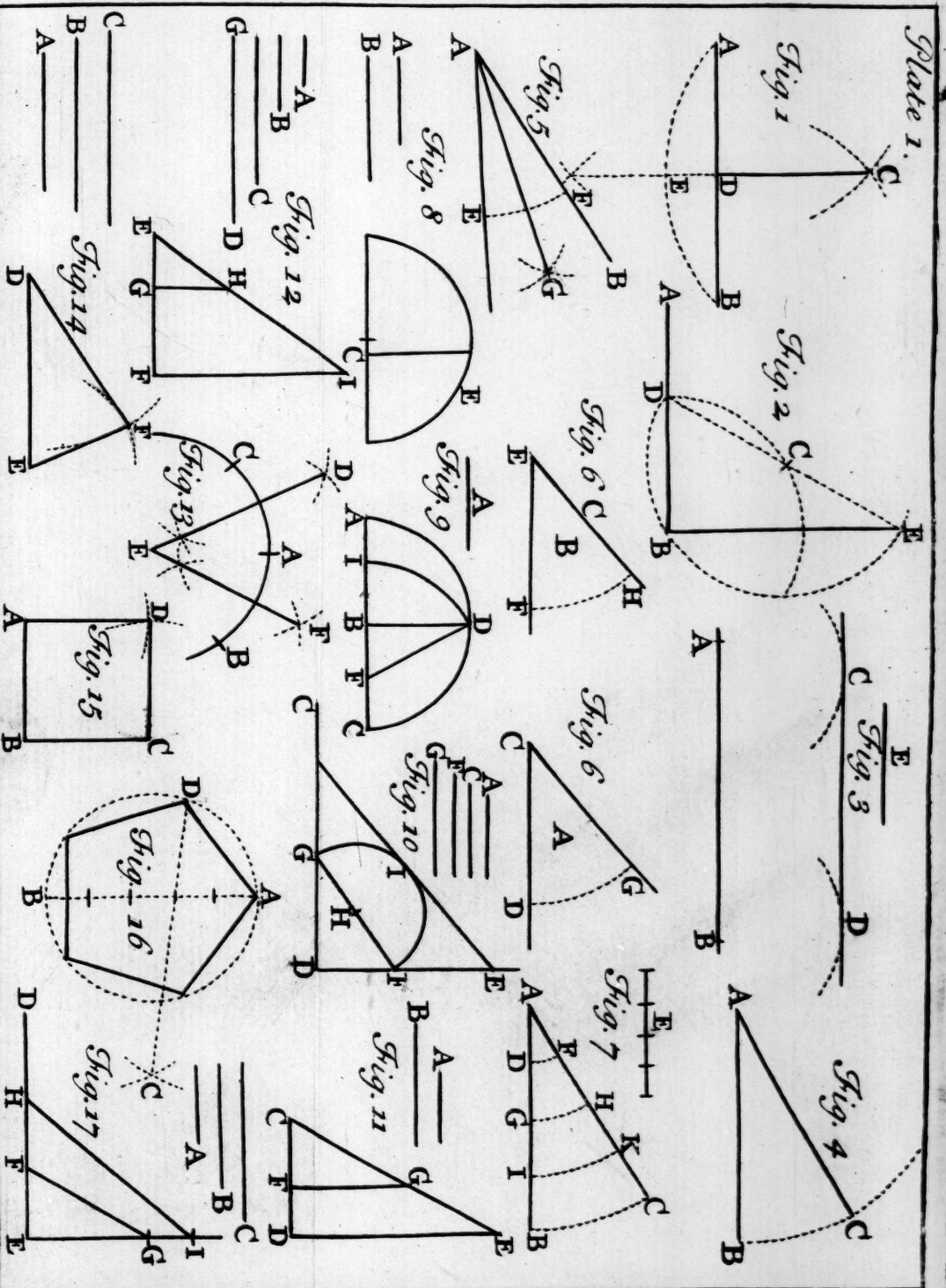
32 MEASURING *made* EASY, &c.

Suppose a Cask, whose Head is 29 In. 3 Parts, and Bung 36 In. 5 Parts, and Length 51 In. 6 Parts, what's the Content in Wine Gallons?

36 : 5	In. P.	
29 : 3	29 : 3	
	4 : 11	
7 : 2		
	34 : 2 Mean. Log.	} 15336027
		} 15336027
	51 : 6 Length. Log.	17118073
		47790127
	Sub. Log. of 294	24683474
	Cont. 204 Gall. $\frac{1}{2}$ Log.	23106653



A TABLE





A
TABLE
OF
LOGARITHMS.



THE UNIVERSITY OF CHICAGO PRESS

A

TABLE

OF

LOGARITHMS

THE UNIVERSITY OF CHICAGO PRESS

A TABLE of LOGARITHMS.

3

1	00000000	4	06020600	7	08450981
1	00347621	1	06110149	1	08502377
2	00669468	2	06197888	2	08553172
3	00969100	3	06283889	3	08603380
4	01249388	4	06368221	4	08653015
5	01512677	5	06450947	5	08702088
6	01760911	6	06532125	6	08750613
7	01995724	7	06611815	7	08798602
8	02218488	8	06690068	8	08846066
9	02430381	9	06766936	9	08893017
10	02632415	10	06842468	10	08939466
11	02825466	11	06916708	11	08985424
2	03010300	5	06989700	8	09030900
1	03187588	1	07061486	1	09075905
2	03357921	2	07132105	2	09120449
3	03521825	3	07201593	3	09164540
4	03679768	4	07269988	4	09208188
5	03832068	5	07337321	5	09251402
6	03979400	6	07403627	6	09294190
7	04121805	7	07468936	7	09336560
8	04259688	8	07533277	8	09378521
9	04393327	9	07596678	9	09420081
10	04522977	10	07659168	10	09461247
11	04648868	11	07720771	11	09502026
3	04771212	6	07781512	9	09542425
1	04890285	1	07841417	1	09582453
2	05006024	2	07900505	2	09622115
3	05118834	3	07958800	3	09661418
4	05228788	4	08016324	4	09700368
5	05336026	5	08073095	5	09738972
6	05440680	6	08129133	6	09777236
7	05542872	7	08184459	7	09815166
8	05642715	8	08239088	8	09852768
9	05740313	9	08293038	9	09890046
10	05835766	10	08346326	10	09927008
11	05929166	11	08398969	11	09963657

10	10000000	13	11139434	16	12041200
1	10036042	1	11167184	1	12063761
2	10071768	2	11194759	2	12086205
3	10107239	3	11222159	3	12108534
4	10142405	4	11249388	4	12130749
5	10177288	5	11276447	5	12152850
6	10211893	6	11303338	6	12174840
7	10246225	7	11330064	7	12196719
8	10280288	8	11356626	8	12218488
9	10314085	9	11383027	9	12240149
10	10347621	10	11409269	10	12261702
11	10380901	11	11435353	11	12283148
11	10413927	14	11461281	17	12304490
1	10446704	1	11487055	1	12325727
2	10479236	2	11512677	2	12346860
3	10511526	3	11538149	3	12367891
4	10543577	4	11563472	4	12388821
5	10575394	5	11588650	5	12409651
6	10606979	6	11613680	6	12430381
7	10638336	7	11638568	7	12451012
8	10669468	8	11663315	8	12471547
9	10700379	9	11687921	9	12491984
10	10731071	10	11712388	10	12512326
11	10761548	11	11736718	11	12532573
12	10791813	15	11760913	18	12552725
1	10821868	1	11784974	1	12572785
2	10851716	2	11808902	2	12592753
3	10881361	3	11832699	3	12612629
4	10910805	4	11856366	4	12632415
5	10940051	5	11879905	5	12652111
6	10969101	6	11903317	6	12671718
7	10997957	7	11926604	7	12691237
8	11026624	8	11949766	8	12710668
9	11055102	9	11972806	9	12730013
10	11083395	10	11995724	10	12749272
11	11111505	11	12018522	11	12768446

TABLE of LOGARITHMS.

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1	12806543	1	13440647	1	13993853
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4	12863068	4	13489536	4	14036924
5	12881747	5	13505711	5	14051186
6	12901347	6	13521826	6	14065402
7	12918867	7	13537881	7	14079572
8	12937308	8	13553877	8	14093695
9	12955671	9	13569814	9	14107773
10	12973958	10	13585694	10	14121805
11	12992167	11	13601515	11	14135792
20	13010300	23	13617279	26	14149734
1	13028358	1	13632986	1	14163631
2	13046341	2	13648636	2	14177484
3	13064251	3	13664230	3	14191294
4	13082086	4	13679768	4	14205059
5	13099849	5	13695251	5	14218781
6	13117539	6	13710679	6	14232459
7	13135157	7	13726052	7	14246095
8	13152705	8	13741371	8	14259688
9	13170181	9	13756637	9	14273238
10	13187588	10	13771848	10	14286747
11	13204925	11	13787007	11	14300213
21	13222193	24	13802113	27	14313638
1	13239393	1	13817166	1	14327022
2	13256525	2	13832168	2	14341364
3	13273590	3	13847118	3	14353666
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5	13307519	5	13876864	5	14380147
6	13324385	6	13891661	6	14393327
7	13341186	7	13906408	7	14406468
8	13357921	8	13921105	8	14419569
9	13374593	9	13935752	9	14432630
10	13391201	10	13950351	10	14445653
11	13407745	11	13964900	11	14458636

28	14471581	31	14913617	34	15314790
1	14484487	1	14925276	1	15325421
2	14497355	2	14936904	2	15336027
3	14510185	3	14948501	3	15346606
4	14522977	4	14960066	4	15357160
5	14535732	5	14971601	5	15367688
6	14548449	6	14983106	6	15378191
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11	14611483	11	15040176	11	15430328
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2	14648868	2	15074061	2	15461313
3	14661259	3	15085298	3	15471592
4	14673615	4	15096505	4	15481847
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7	14710472	7	15129956	7	15512467
8	14722688	8	15141049	8	15522626
9	14734870	9	15152114	9	15532761
10	14747018	10	15163150	10	15542873
11	14759133	11	15174159	11	15552961
30	14771213	33	15185140	36	15563025
1	14783260	1	15196093	1	15573067
2	14795274	2	15207019	2	15583084
3	14807254	3	15217917	3	15593081
4	14819202	4	15228788	4	15603053
5	14831117	5	15239632	5	15613002
6	14842999	6	15250449	6	15622929
7	14854849	7	15261239	7	15632838
8	14866666	8	15272002	8	15642715
9	14878452	9	15282738	9	15652574
10	14890205	10	15293448	10	15662411
11	14901927	11	15304132	11	15672225

A TABLE of LOGARITHMS.

7

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2	15701537	2	16038658	2	16351486
3	15711263	3	16047659	3	16359862
4	15720968	4	16056642	4	16368221
5	15730651	5	16065605	5	16376566
6	15740313	6	16074551	6	16384893
7	15749953	7	16083478	7	16393205
8	15759572	8	16092386	8	16401501
9	15769170	9	16101277	9	16409781
10	15778747	10	16110149	10	16418045
11	15788302	11	16119003	11	16426294
38	15797836	41	16127839	44	16434527
1	15807350	1	16136657	1	16442745
2	15816843	2	16145457	2	16450947
3	15826315	3	16154240	3	16459133
4	15835766	4	16163005	4	16467304
5	15845197	5	16172752	5	16475460
6	15854608	6	16181481	6	16483601
7	15863998	7	16189193	7	16491726
8	15873368	8	16197888	8	16499836
9	15882718	9	16206565	9	16507930
10	15892047	10	16215225	10	16516010
11	15901357	11	16223868	11	16524076
39	15910647	42	16232493	45	16532126
1	15919916	1	16241102	1	16540161
2	15929166	2	16249693	2	16548181
3	15938397	3	16258268	3	16556186
4	15947608	4	16266825	4	16564177
5	15956799	5	16275366	5	16572153
6	15965971	6	16283890	6	16580114
7	15975124	7	16292397	7	16588061
8	15984257	8	16300888	8	16595994
9	15993372	9	16309362	9	16603911
10	16002467	10	16317819	10	16611815
11	16011543	11	16326259	11	16619704

46	16627579	49	16901961	52	17160034
1	16635439	1	16909341	1	17166988
2	16643286	2	16916708	2	17172931
3	16651118	3	16924063	3	17180863
4	16658936	4	16931405	4	17187784
5	16666740	5	16938735	5	17194694
6	16674530	6	16946052	6	17201594
7	16682306	7	16953358	7	17208482
8	16690068	8	16960651	8	17215359
9	16697817	9	16967931	9	17222225
10	16705551	10	16975200	10	17229081
11	16713272	11	16982456	11	17235925
47	16720979	50	16989700	53	17242759
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2	16736352	2	17004153	2	17256395
3	16744019	3	17011361	3	17263197
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7	16774549	7	17040075	7	17291298
8	16782148	8	17047224	8	17297047
9	16789734	9	17054361	9	17303785
10	16797307	10	17061486	10	17310513
11	16804866	11	17068600	11	17317231
48	16812413	51	17075502	54	17323938
1	16819946	1	17082793	1	17330635
2	16827466	2	17089872	2	17337322
3	16834974	3	17096939	3	17343998
4	16842468	4	17103995	4	17350664
5	16849949	5	17111040	5	17357320
6	16857418	6	17118073	6	17363966
7	16864874	7	17125095	7	17370601
8	16872316	8	17132105	8	17377226
9	16879747	9	17139104	9	17383842
10	16887164	10	17146092	10	17390447
11	16894569	11	17153068	11	17397042

55	17403627	58	17634280	61	17853299
1	17410203	1	17640516	1	17859228
2	17416768	2	17646742	2	17865149
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5	17436404	5	17665368	5	17882863
6	17442930	6	17671559	6	17888752
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2	17494787	2	17720771	2	17935575
3	17501226	3	17726884	3	17941394
4	17507655	4	17732988	4	17947204
5	17514075	5	17739083	5	17953006
6	17520485	6	17745170	6	17958801
7	17526886	7	17751248	7	17964587
8	17533277	8	17757318	8	17970366
9	17539659	9	17763380	9	17976138
10	17546032	10	17769432	10	17981901
11	17552395	11	17775477	11	17987657
57	17558749	60	17781513	63	17993405
1	17565094	1	17787541	1	17999147
2	17571429	2	17793560	2	18004880
3	17577755	3	17799571	3	18010606
4	17584072	4	17805574	4	18016324
5	17590380	5	17811568	5	18022035
6	17596679	6	17817554	6	18027738
7	17602969	7	17823532	7	18033433
8	17609249	8	17829502	8	18039122
9	17615520	9	17835463	9	18044802
10	17621783	10	17841417	10	18050476
11	17628036	11	17847362	11	18056142

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2	18073095	2	18271538	2	18461309
3	18078732	3	18276923	3	18466464
4	18084361	4	18282302	4	18471612
5	18089983	5	18287673	5	18476755
6	18095598	6	18293038	6	18481892
7	18101205	7	18298396	7	18487022
8	18106805	8	18303748	8	18492146
9	18112398	9	18309093	9	18497265
10	18117984	10	18314432	10	18502377
11	18123563	11	18319764	11	18507484
65	18129134	68	18325089	71	18512584
1	18134698	1	18330408	1	18517678
2	18140255	2	18335721	2	18522767
3	18145806	3	18341027	3	18527849
4	18151349	4	18346326	4	18532926
5	18156884	5	18351619	5	18537996
6	18162413	6	18356906	6	18543061
7	18167935	7	18362186	7	18548120
8	18173450	8	18367460	8	18553172
9	18178958	9	18372727	9	18558219
10	18184459	10	18377988	10	18563261
11	18189953	11	18383243	11	18568296
66	18195440	69	18388491	72	18573325
1	18200920	1	18393733	1	18578350
2	18206393	2	18398969	2	18583367
3	18211859	3	18404198	3	18588379
4	18217319	4	18409421	4	18593385
5	18222771	5	18414638	5	18598386
6	18228217	6	18419848	6	18603380
7	18233656	7	18425053	7	18608369
8	18239088	8	18430251	8	18613353
9	18244513	9	18435442	9	18618330
10	18249932	10	18440628	10	18623302
11	18255343	11	18445808	11	18628268

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73	18633229	76	18808136	79	18976271
1	18638184	1	18812896	1	18980850
2	18643133	2	18817650	2	18985424
3	18648077	3	18822399	3	18989993
4	18653015	4	18827143	4	18994557
5	18657947	5	18831881	5	18999117
6	18662874	6	18836615	6	19003672
7	18667795	7	18841343	7	19008222
8	18672711	8	18846066	8	19012767
9	18677621	9	18850784	9	19017307
10	18682525	10	18855496	10	19021843
11	18687424	11	18860205	11	19026374
74	18692318	77	18864908	80	19030900
1	18697206	1	18869605	1	19035422
2	18702088	2	18874298	2	19039938
3	18706965	3	18878985	3	19044451
4	18711836	4	18883668	4	19048958
5	18716702	5	18888345	5	19053461
6	18721563	6	18893017	6	19057959
7	18726418	7	18897685	7	19062453
8	18731268	8	18902347	8	19066941
9	18736112	9	18907004	9	19071426
10	18740951	10	18911658	10	19075905
11	18746385	11	18916304	11	19080380
75	18750613	78	18920946	81	19084851
1	18755436	1	18925584	1	19089316
2	18760253	2	18930216	2	19093777
3	18765065	3	18934844	3	19098234
4	18769872	4	18939466	4	19102686
5	18774674	5	18944084	5	19107134
6	18779470	6	18948697	6	19111576
7	18784261	7	18953305	7	19116015
8	18789046	8	18957908	8	19120449
9	18793827	9	18962506	9	19124878
10	18798602	10	18967099	10	19129303
11	18803372	11	18971688	11	19133723

82	19138139	85	19294190	88	19444827
1	19142550	1	19298445	1	19448938
2	19146957	2	19302697	2	19453045
3	19151359	3	19306944	3	19457148
4	19155757	4	19311187	4	19461247
5	19160151	5	19315427	5	19465342
6	19164540	6	19319661	6	19469433
7	19168924	7	19323892	7	19473521
8	19173305	8	19328119	8	19477604
9	19177680	9	19332342	9	19481684
10	19182052	10	19336560	10	19485760
11	19186419	11	19340775	11	19489832
83	19190781	86	19344985	89	19493900
1	19195139	1	19349191	1	19497965
2	19199493	2	19353393	2	19502026
3	19203843	3	19357591	3	19506083
4	19208188	4	19361785	4	19510136
5	19212529	5	19365975	5	19514185
6	19216865	6	19370161	6	19518231
7	19221197	7	19374343	7	19522273
8	19225525	8	19378521	8	19526312
9	19229849	9	19382695	9	19530345
10	19234168	10	19386865	10	19534376
11	19238483	11	19391031	11	19538402
84	19242793	87	19395193	90	19542425
1	19247100	1	19399351	1	19546445
2	19251402	2	19403505	2	19550461
3	19255699	3	19407655	3	19554472
4	19259993	4	19411801	4	19558481
5	19264282	5	19415943	5	19562485
6	19268567	6	19420081	6	19566486
7	19272848	7	19424215	7	19570483
8	19277125	8	19428345	8	19574477
9	19281397	9	19432472	9	19578467
10	19285666	10	19436594	10	19582453
11	19289930	11	19440712	11	19586435

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91	19590414	94	19731279	97	19867718
1	19594389	1	19735127	1	19871447
2	19598361	2	19738972	2	19875173
3	19602329	3	19742824	3	19878896
4	19606293	4	19746652	4	19882616
5	19610254	5	19750487	5	19886333
6	19614211	6	19754318	6	19890047
7	19618165	7	19758146	7	19893757
8	19622115	8	19761971	8	19897464
9	19626061	9	19765792	9	19901168
10	19630004	10	19769611	10	19904869
11	19633943	11	19773425	11	19908567
92	19637879	95	19777236	98	19912261
1	19641811	1	19781044	1	19915953
2	19645739	2	19784849	2	19919641
3	19649664	3	19788650	3	19923326
4	19653586	4	19792448	4	19927008
5	19657503	5	19796243	5	19930687
6	19661418	6	19800034	6	19934363
7	19665328	7	19803822	7	19938035
8	19669236	8	19807607	8	19941705
9	19673140	9	19811388	9	19945371
10	19677040	10	19815166	10	19949035
11	19680937	11	19818941	11	19952695
93	19684830	96	19822713	99	19956352
1	19688720	1	19826481	1	19960006
2	19692606	2	19830246	2	19963658
3	19696489	3	19834008	3	19967306
4	19700368	4	19837766	4	19970950
5	19704244	5	19841521	5	19974592
6	19708116	6	19845273	6	19978231
7	19711985	7	19849022	7	19981867
8	19715851	8	19852768	8	19985500
9	19719713	9	19856510	9	19989129
10	19723572	10	19860249	10	19992756
11	19727427	11	19863985	11	19996380

100	20000000	103	20128373	106	20253059
1	20003618	1	20131884	1	20256472
2	20007233	2	20135394	2	20259882
3	20010844	3	20138900	3	20263290
4	20014453	4	20142405	4	20266695
5	20018058	5	20145906	5	20270097
6	20021661	6	20149404	6	20273496
7	20025261	7	20152899	7	20276893
8	20028857	8	20156392	8	20280288
9	20032451	9	20159881	9	20283679
10	20036042	10	20163368	10	20287068
11	20039629	11	20166852	11	20290454
101	20043214	104	20170334	107	20293838
1	20046796	1	20173812	1	20297219
2	20050375	2	20177288	2	20300598
3	20053951	3	20180761	3	20303973
4	20057524	4	20184231	4	20307347
5	20061094	5	20187699	5	20310717
6	20064661	6	20191163	6	20314085
7	20068225	7	20194625	7	20317450
8	20071786	8	20198084	8	20320813
9	20075344	9	20201541	9	20324173
10	20078900	10	20204994	10	20327531
11	20082452	11	20208445	11	20330886
102	20086002	105	20211893	108	20334238
1	20089549	1	20215339	1	20337588
2	20093093	2	20218781	2	20340935
3	20096634	3	20222221	3	20344279
4	20100172	4	20225659	4	20347621
5	20103707	5	20229093	5	20350961
6	20107239	6	20232525	6	20354298
7	20110768	7	20235954	7	20357632
8	20114295	8	20239380	8	20360964
9	20117819	9	20242804	9	20364293
10	20121339	10	20246225	10	20367620
11	20124857	11	20249643	11	20370944

109	20374265	112	20492181	115	20606979
1	20377584	1	20495411	1	20610125
2	20380901	2	20498638	2	20613268
3	20384215	3	20501866	3	20616410
4	20387526	4	20505087	4	20619549
5	20390835	5	20508307	5	20622686
6	20394142	6	20511526	6	20625820
7	20397445	7	20514741	7	20628953
8	20400747	8	20517955	8	20632083
9	20404046	9	20521166	9	20635210
10	20407342	10	20524375	10	20638336
11	20410636	11	20527581	11	20641459
110	20413927	113	20530085	116	20644580
1	20417216	1	20533986	1	20647699
2	20420502	2	20537186	2	20650816
3	20423786	3	20540383	3	20653930
4	20427068	4	20543577	4	20657042
5	20430347	5	20546769	5	20660152
6	20433623	6	20549959	6	20663259
7	20436897	7	20553146	7	20666365
8	20440169	8	20556332	8	20669468
9	20443438	9	20559514	9	20672569
10	20446704	10	20562695	10	20675668
11	20449968	11	20565873	11	20678765
111	20453230	114	20569049	117	20681859
1	20456589	1	20572222	1	20684952
2	20459746	2	20575394	2	20688041
3	20463001	3	20578562	3	20691129
4	20466252	4	20581729	4	20694214
5	20469502	5	20584893	5	20697298
6	20472749	6	20588055	6	20700379
7	20475994	7	20591215	7	20703458
8	20479236	8	20594372	8	20706535
9	20482476	9	20597522	9	20709610
10	20485713	10	20600680	10	20712682
11	20488948	11	20603831	11	20715752

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118	20718820	121	20827854	124	20934217
1	20721886	1	20830844	1	20937135
2	20724950	2	20833832	2	20940051
3	20728012	3	20836818	3	20942964
4	20731071	4	20839802	4	20945876
5	20734129	5	20842783	5	20948786
6	20737184	6	20845763	6	20951694
7	20740237	7	20848741	7	20954600
8	20743288	8	20851716	8	20957504
9	20746337	9	20854690	9	20960406
10	20749383	10	20857662	10	20963306
11	20752428	11	20860631	11	20966204
119	20755470	122	20863599	125	20969101
1	20758510	1	20866564	1	20971995
2	20761548	2	20869528	2	20974887
3	20764584	3	20872489	3	20977778
4	20767618	4	20875448	4	20980666
5	20770650	5	20878406	5	20983553
6	20773679	6	20881361	6	20986438
7	20776707	7	20884315	7	20989320
8	20779732	8	20887266	8	20992201
9	20782756	9	20890215	9	20995080
10	20785777	10	20893163	10	20997957
11	20788796	11	20896108	11	21000833
120	20791813	123	20899051	126	21003706
1	20794828	1	20901993	1	21006577
2	20797841	2	20904932	2	21009447
3	20800851	3	20907870	3	21012314
4	20803860	4	20910805	4	21015180
5	20806866	5	20913738	5	21018040
6	20809871	6	20916670	6	21020906
7	20812873	7	20919599	7	21023766
8	20815874	8	20922527	8	21026624
9	20818872	9	20925452	9	21029480
10	20821868	10	20928376	10	21032334
11	20824862	11	20931298	11	21035187

127	21038038	130	21139434	133	21238517
1	21040886	1	21142217	1	21241237
2	21043733	2	21144998	2	21243956
3	21046578	3	21147778	3	21246673
4	21049421	4	21150555	4	21249388
5	21052263	5	21153331	5	21252101
6	21055102	6	21156105	6	21254813
7	21057940	7	21158878	7	21257523
8	21060776	8	21161648	8	21260232
9	21063609	9	21164417	9	21262938
10	21066441	10	21167184	10	21265643
11	21069272	11	21169950	11	21268347
128	21072100	131	21172713	134	21271057
1	21074927	1	21175475	1	21273748
2	21077751	2	21178235	2	21276447
3	21080554	3	21180994	3	21279143
4	21083395	4	21183750	4	21281838
5	21086214	5	21186505	5	21284532
6	21089032	6	21189258	6	21287223
7	21091847	7	21192009	7	21289913
8	21094661	8	21194759	8	21292602
9	21097473	9	21197507	9	21295288
10	21100283	10	21200253	10	21297973
11	21103091	11	21202997	11	21300656
129	21105897	132	21205740	135	21303338
1	21108702	1	21208481	1	21306018
2	21111505	2	21211220	2	21308696
3	21114306	3	21213957	3	21311373
4	21117105	4	21216693	4	21314048
5	21119902	5	21219427	5	21316722
6	21122698	6	21222159	6	21319393
7	21125492	7	21224890	7	21322064
8	21128284	8	21227619	8	21324732
9	21131074	9	21230346	9	21327399
10	21133862	10	21233071	10	21330064
11	21136649	11	21235795	11	21332728

136	21335389	139	21430148	142	21522884
1	21338050	1	21432751	1	21525432
2	21340709	2	21435353	2	21527978
3	21343366	3	21437952	3	21530523
4	21346021	4	21440551	4	21533067
5	21348675	5	21443147	5	21535609
6	21351327	6	21445743	6	21538149
7	21353977	7	21448336	7	21540688
8	21356626	8	21450928	8	21543226
9	21359274	9	21453519	9	21545762
10	21361920	10	21456108	10	21548296
11	21364564	11	21458695	11	21550829
137	21367206	140	21461281	143	21553361
1	21369847	1	21463865	1	21555891
2	21372486	2	21466448	2	21558420
3	21375124	3	21469029	3	21560947
4	21377760	4	21471609	4	21563472
5	21380394	5	21474187	5	21565997
6	21383027	6	21476764	6	21568519
7	21385659	7	21479339	7	21571041
8	21388288	8	21481912	8	21573561
9	21390916	9	21484484	9	21576079
10	21393543	10	21487055	10	21578596
11	21396168	11	21489624	11	21581111
138	21398791	141	21492192	144	21583625
1	21401413	1	21494758	1	21586138
2	21404033	2	21497322	2	21588649
3	21406652	3	21499885	3	21591159
4	21409269	4	21502446	4	21593667
5	21411884	5	21505006	5	21596174
6	21414498	6	21507565	6	21598679
7	21417109	7	21510122	7	21601183
8	21419721	8	21512677	8	21603685
9	21422330	9	21515231	9	21606186
10	21424938	10	21517784	10	21608686
11	21427544	11	21520334	11	21611184

145	21613680	148	21702618	151	21789770
1	21616176	1	21705062	1	21792166
2	21618669	2	21707506	2	21794561
3	21621162	3	21709947	3	21796954
4	21623653	4	21712388	4	21799346
5	21626142	5	21714827	5	21801737
6	21628630	6	21717265	6	21804127
7	21631117	7	21719701	7	21806515
8	21633601	8	21722136	8	21808902
9	21636086	9	21724570	9	21811287
10	21638568	10	21727003	10	21813672
11	21641049	11	21729434	11	21816055
146	21643529	149	21731863	152	21818436
1	21646007	1	21734291	1	21820817
2	21648484	2	21736718	2	21823196
3	21650959	3	21739144	3	21825573
4	21653433	4	21741568	4	21827950
5	21655906	5	21743991	5	21830325
6	21658377	6	21746412	6	21832699
7	21660846	7	21748833	7	21835071
8	21663315	8	21751251	8	21837443
9	21665781	9	21753669	9	21839813
10	21668247	10	21756085	10	21842181
11	21670711	11	21758500	11	21844549
147	21673176	150	21760913	153	21846915
1	21675635	1	21763325	1	21849280
2	21678095	2	21765736	2	21851643
3	21680553	3	21768145	3	21854005
4	21683011	4	21770553	4	21856366
5	21685466	5	21772960	5	21858726
6	21687921	6	21775365	6	21861084
7	21690374	7	21777770	7	21863441
8	21692824	8	21780172	8	21865797
9	21695275	9	21782574	9	21868152
10	21697724	10	21784974	10	21870505
11	21700172	11	21787372	11	21872857

154	21875208	157	21958997	160	22041200
1	21877557	1	21961301	1	22043462
2	21879905	2	21963605	2	22045722
3	21882252	3	21965907	3	22047981
4	21884598	4	21968208	4	22050239
5	21886942	5	21970508	5	22052495
6	21889285	6	21972806	6	22054751
7	21891627	7	21975103	7	22057005
8	21893968	8	21977399	8	22059258
9	21896307	9	21979694	9	22061510
10	21898645	10	21981988	10	22063761
11	21900982	11	21984280	11	22066011
155	21903317	158	21986571	161	22068259
1	21905652	1	21988861	1	22070506
2	21907985	2	21991150	2	22072753
3	21910316	3	21993438	3	22074998
4	21912647	4	21995724	4	22077242
5	21914976	5	21998009	5	22079484
6	21917304	6	22000293	6	22081726
7	21919631	7	22002576	7	22083966
8	21921957	8	22004857	8	22086205
9	21924282	9	22007138	9	22088443
10	21926604	10	22009417	10	22090680
11	21928926	11	22011695	11	22092916
156	21931246	159	22013972	162	22095151
1	21933566	1	22016247	1	22097384
2	21935884	2	22018222	2	22099616
3	21938201	3	22020795	3	22101847
4	21940516	4	22023067	4	22104077
5	21942831	5	22025338	5	22106306
6	21945144	6	22027607	6	22108534
7	21947456	7	22029876	7	22110761
8	21949766	8	22032143	8	22112986
9	21952076	9	22034409	9	22115210
10	21954384	10	22036674	10	22117434
11	21956691	11	22038938	11	22119656

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163	22121876	166	22201081	169	22278867
1	22124096	1	22203261	1	22281008
2	22126315	2	22205439	2	22283148
3	22128532	3	22207617	3	22285287
4	22130749	4	22209793	4	22287425
5	22132964	5	22211969	5	22289562
6	22135178	6	22214143	6	22291697
7	22137391	7	22216316	7	22293832
8	22139603	8	22218488	8	22295966
9	22141814	9	22220659	9	22298098
10	22144023	10	22222829	10	22300230
11	22146229	11	22224997	11	22302360
164	22148439	167	22227165	170	22304490
1	22150645	1	22229332	1	22306618
2	22152850	2	22231497	2	22308745
3	22155054	3	22233662	3	22310872
4	22157257	4	22235825	4	22312997
5	22159459	5	22237987	5	22315111
6	22161659	6	22240149	6	22317244
7	22163859	7	22242309	7	22319366
8	22166057	8	22244468	8	22321487
9	22168255	9	22246626	9	22323608
10	22170451	10	22248783	10	22325727
11	22172646	11	22250939	11	22327845
165	22174840	168	22253093	171	22329962
1	22177033	1	22255247	1	22332077
2	22179224	2	22257400	2	22334192
3	22181415	3	22259551	3	22336306
4	22183605	4	22261702	4	22338419
5	22185793	5	22263851	5	22340531
6	22187980	6	22266000	6	22342642
7	22190167	7	22268147	7	22344751
8	22192352	8	22270293	8	22346860
9	22194536	9	22272438	9	22348968
10	22196719	10	22274582	10	22351075
11	22198901	11	22276725	11	22353180

172	22355285	175	22430381	178	22504200
1	22357388	1	22432448	1	22506233
2	22359491	2	22434515	2	22508265
3	22361593	3	22436581	3	22510296
4	22363693	4	22438645	4	22512326
5	22365793	5	22440709	5	22514355
6	22367891	6	22442772	6	22516388
7	22369989	7	22444833	7	22518410
8	22372085	8	22446894	8	22520436
9	22374181	9	22448954	9	22522461
10	22376275	10	22451013	10	22524485
11	22378369	11	22453070	11	22526508
173	22380461	176	22455127	179	22528531
1	22382553	1	22457183	1	22530552
2	22384643	2	22459236	2	22532573
3	22386733	3	22461292	3	22534592
4	22388821	4	22463345	4	22536611
5	22390909	5	22465397	5	22538628
6	22392995	6	22467448	6	22540645
7	22395081	7	22469498	7	22542661
8	22397165	8	22471547	8	22544676
9	22399249	9	22473595	9	22546689
10	22401331	10	22475642	10	22548702
11	22403412	11	22477688	11	22550714
174	22405493	177	22479733	180	22552725
1	22407572	1	22481777	1	22554736
2	22409651	2	22483821	2	22556745
3	22411728	3	22485863	3	22558753
4	22413805	4	22487904	4	22560760
5	22415880	5	22489945	5	22562767
6	22417955	6	22491984	6	22564773
7	22420028	7	22494022	7	22566777
8	22422101	8	22496060	8	22568781
9	22424171	9	22498097	9	22570784
10	22426243	10	22500132	10	22572785
11	22428312	11	22502167	11	22574786

181	22576786	184	22648189	187	22718416
1	22578785	1	22650145	1	22720351
2	22580783	2	22652111	2	22722286
3	22582781	3	22654075	3	22724219
4	22584777	4	22656039	4	22726151
5	22586772	5	22658002	5	22728083
6	22588767	6	22659964	6	22730013
7	22590760	7	22661925	7	22731943
8	22592753	8	22663886	8	22733872
9	22594745	9	22665845	9	22735801
10	22596735	10	22667803	10	22737727
11	22598725	11	22669761	11	22739653
182	22600714	185	22671718	188	22741579
1	22602702	1	22673674	1	22743504
2	22604689	2	22675629	2	22745427
3	22606676	3	22677583	3	22747350
4	22608661	4	22679536	4	22749272
5	22610646	5	22681488	5	22751194
6	22612629	6	22683440	6	22753114
7	22614612	7	22685390	7	22755034
8	22616593	8	22687340	8	22756952
9	22618574	9	22689289	9	22758870
10	22620554	10	22691237	10	22760787
11	22622533	11	22693184	11	22762703
183	22624511	186	22695130	189	22764618
1	22626489	1	22697075	1	22766533
2	22628465	2	22699020	2	22768447
3	22630440	3	22700965	3	22770359
4	22632415	4	22702906	4	22772271
5	22634388	5	22704848	5	22774182
6	22636361	6	22706789	6	22776093
7	22638333	7	22708729	7	22778002
8	22640304	8	22710668	8	22779910
9	22642274	9	22712607	9	22781818
10	22644243	10	22714544	10	22783725
11	22646211	11	22716481	11	22785631

190	22787536	193	22855574	196	22922561
1	22789441	1	22857448	1	22924407
2	22791344	2	22859322	2	22926253
3	22793247	3	22861195	3	22928097
4	22795149	4	22863068	4	22929941
5	22797050	5	22864939	5	22931784
6	22798950	6	22866810	6	22933626
7	22800850	7	22868680	7	22935467
8	22802748	8	22870549	8	22937308
9	22804646	9	22872418	9	22939148
10	22806543	10	22874285	10	22940987
11	22808439	11	22876152	11	22942825
191	22810334	194	22878018	197	22944663
1	22812229	1	22879883	1	22946499
2	22814122	2	22881747	2	22948335
3	22816015	3	22883611	3	22950171
4	22817907	4	22885473	4	22952005
5	22819798	5	22887335	5	22953839
6	22821688	6	22889196	6	22955671
7	22823578	7	22891057	7	22957504
8	22825466	8	22892916	8	22959335
9	22827354	9	22894775	9	22961165
10	22829241	10	22896633	10	22962995
11	22831127	11	22898490	11	22964824
192	22833013	195	22900347	198	22966652
1	22834897	1	22902202	1	22968480
2	22836781	2	22904057	2	22970306
3	22838664	3	22905911	3	22972132
4	22840546	4	22907764	4	22973957
5	22842427	5	22909616	5	22975782
6	22844308	6	22911468	6	22977606
7	22846188	7	22913319	7	22979428
8	22848066	8	22915169	8	22981250
9	22849944	9	22917018	9	22983072
10	22851821	10	22918866	10	22984892
11	22853698	11	22920714	11	22986712

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199	22988531	202	23053514	205	23117539
1	22990349	1	23055305	1	23119304
2	22992167	2	23057096	2	23121068
3	22993984	3	23058886	3	23122832
4	22995800	4	23060675	4	23124595
5	22997615	5	23062463	5	23126357
6	22999429	6	23064251	6	23128119
7	23001243	7	23066038	7	23129879
8	23003056	8	23067824	8	23131640
9	23004868	9	23069609	9	23133399
10	23006680	10	23071394	10	23135157
11	23008490	11	23073178	11	23136915
200	23010301	203	23074961	206	23138673
1	23012110	1	23076743	1	23140429
2	23013918	2	23078525	2	23142185
3	23015726	3	23080306	3	23143940
4	23017533	4	23082086	4	23145694
5	23019339	5	23083866	5	23147448
6	23021144	6	23085645	6	23149201
7	23022949	7	23087423	7	23150953
8	23024753	8	23089200	8	23152705
9	23026556	9	23090977	9	23154456
10	23028358	10	23092753	10	23156206
11	23030160	11	23094528	11	23157955
201	23031961	204	23096302	207	23159704
1	23033761	1	23098076	1	23161452
2	23035561	2	23099849	2	23163199
3	23037359	3	23101621	3	23164946
4	23039157	4	23103393	4	23166692
5	23040954	5	23105163	5	23168437
6	23042751	6	23106934	6	23170181
7	23044547	7	23108703	7	23171925
8	23046342	8	23110472	8	23173668
9	23048136	9	23112240	9	23175411
10	23049929	10	23114007	10	23177152
11	23051722	11	23115773	11	23178893

208	23180634	211	23242825	214	23304138
1	23182373	1	23244540	1	23305829
2	23184112	2	23246254	2	23307519
3	23185850	3	23247968	3	23309209
4	23187588	4	23249680	4	23310898
5	23189325	5	23251393	5	23312586
6	23191061	6	23253104	6	23314273
7	23192796	7	23254815	7	23315959
8	23194531	8	23256525	8	23317647
9	23196265	9	23258235	9	23319332
10	23197999	10	23259943	10	23321017
11	23199731	11	23261651	11	23322701
209	23201463	212	23263359	215	23324385
1	23203183	1	23265066	1	23326068
2	23204925	2	23266772	2	23327750
3	23206655	3	23268477	3	23329432
4	23208384	4	23270182	4	23331113
5	23210113	5	23271886	5	23332793
6	23211841	6	23223590	6	23334473
7	23213568	7	23275293	7	23336152
8	23215294	8	23276995	8	23337830
9	23217020	9	23278696	9	23339508
10	23218745	10	23280397	10	23341186
11	23220470	11	23282097	11	23342862
210	23222193	213	23283796	216	23344538
1	23223916	1	23285495	1	23346213
2	23225639	2	23287193	2	23347888
3	23227361	3	23288891	3	23349562
4	23229081	4	23290588	4	23351235
5	23230802	5	23292284	5	23352907
6	23232521	6	23293979	6	23354579
7	23234240	7	23295674	7	23356251
8	23235959	8	23297368	8	23357921
9	23237676	9	23299062	9	23359592
10	23239393	10	23300755	10	23361261
11	23241109	11	23302447	11	23362930

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217	23364598	220	23424227	223	23483049
1	23366266	1	23425872	1	23484672
2	23367932	2	23427516	2	23486284
3	23369598	3	23429160	3	23487915
4	23371264	4	23430802	4	23489536
5	23372929	5	23432445	5	23491156
6	23374593	6	23434086	6	23492776
7	23376257	7	23435727	7	23494395
8	23377920	8	23437368	8	23496013
9	23379582	9	23439008	9	23497630
10	23381244	10	23440647	10	23499248
11	23382905	11	23442285	11	23500865
218	23384665	221	23443923	224	23502481
1	23386225	1	23445560	1	23504096
2	23387884	2	23447197	2	23505710
3	23389543	3	23448833	3	23507325
4	23391201	4	23450469	4	23508939
5	23392858	5	23452104	5	23510552
6	23394515	6	23453738	6	23512164
7	23396171	7	23455371	7	23513776
8	23397826	8	23457004	8	23515387
9	23399481	9	23458637	9	23516997
10	23401135	10	23460268	10	23518607
11	23402789	11	23461900	11	23520217
219	23404442	222	23463530	225	23521826
1	23406094	1	23465160	1	23523434
2	23407745	2	23466789	2	23525040
3	23409396	3	23468418	3	23526648
4	23411047	4	23470046	4	23528254
5	23412697	5	23471674	5	23529861
6	23414346	6	23473301	6	23531466
7	23415994	7	23474927	7	23533071
8	23417642	8	23476553	8	23534675
9	23419289	9	23478178	9	23536278
10	23420936	10	23479802	10	23537881
11	23422582	11	23481426	11	23539483

226	23541085	229	23598355	232	23654880
1	23542686	1	23599935	1	23656440
2	23544286	2	23601515	2	23657999
3	23545886	3	23603094	3	23659558
4	23547486	4	23604672	4	23661116
5	23549084	5	23606250	5	23662673
6	23550682	6	23607827	6	23664230
7	23552280	7	23609404	7	23665786
8	23553877	8	23610980	8	23667342
9	23555473	9	23612556	9	23668897
10	23557069	10	23614131	10	23670452
11	23558664	11	23615705	11	23672006
227	23560259	230	23617279	233	23673559
1	23561853	1	23618852	1	23675113
2	23563446	2	23620425	2	23676665
3	23565039	3	23621997	3	23678217
4	23566632	4	23623568	4	23679768
5	23568223	5	23625139	5	23681319
6	23569814	6	23626710	6	23682869
7	23571405	7	23628280	7	23684419
8	23572995	8	23629849	8	23685968
9	23574584	9	23631417	9	23687517
10	23576173	10	23632986	10	23689065
11	23577761	11	23634553	11	23690612
228	23579349	231	23636120	234	23692159
1	23580936	1	23637687	1	23693705
2	23582522	2	23639253	2	23695251
3	23584108	3	23640818	3	23696796
4	23585694	4	23642383	4	23698341
5	23587278	5	23643947	5	23699885
6	23588863	6	23645510	6	23701429
7	23590446	7	23647073	7	23702972
8	23592029	8	23648636	8	23704514
9	23593611	9	23650198	9	23706056
10	23595193	10	23651759	10	23707598
11	23596775	11	23653320	11	23709139

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235	23710679	238	23765770	241	23820171
1	23712219	1	23767290	1	23821672
2	23713758	2	23768810	2	23823173
3	23715297	3	23770330	3	23824674
4	23716835	4	23771843	4	23826174
5	23718372	5	23773367	5	23827673
6	23719909	6	23774884	6	23829172
7	23721446	7	23776401	7	23830670
8	23722982	8	23777918	8	23832168
9	23724517	9	23779434	9	23833665
10	23726052	10	23780950	10	23835162
11	23727587	11	23782464	11	23836658
236	23729120	239	23783979	242	23838154
1	23730654	1	23785493	1	23839649
2	23732186	2	23787007	2	23841144
3	23733719	3	23788520	3	23842638
4	23735250	4	23790032	4	23844132
5	23736781	5	23791544	5	23845625
6	23738312	6	23793056	6	23847118
7	23739842	7	23794566	7	23848610
8	23741371	8	23796077	8	23850102
9	23742900	9	23797587	9	23851593
10	23744429	10	23799096	10	23853083
11	23745957	11	23800605	11	23854374
237	23747484	240	23802113	243	23856063
1	23749011	1	23803621	1	23857552
2	23750537	2	23805128	2	23859041
3	23752063	3	23806634	3	23860529
4	23753588	4	23808141	4	23862016
5	23755112	5	23809646	5	23863504
6	23756637	6	23811151	6	23864990
7	23758160	7	23812656	7	23866476
8	23759683	8	23814160	8	23867963
9	23761206	9	23815663	9	23869447
10	23762728	10	23817166	10	23870931
11	23764249	11	23818669	11	23872415

244	23873899	247	23926976	250	23979400
1	23875382	1	23928435	1	23980848
2	23876846	2	23929899	2	23982295
3	23878346	3	23931363	3	23983741
4	23879828	4	23932827	4	23985187
5	23881308	5	23934290	5	23986633
6	23882789	6	23935752	6	23988078
7	23884269	7	23937215	7	23989522
8	23885748	8	23938676	8	23990963
9	23887227	9	23940137	9	23992412
10	23888706	10	23941598	10	23993853
11	23890182	11	23943058	11	23995296
245	23891661	248	23944517	251	23996738
1	23893138	1	23945976	1	23998179
2	23894615	2	23947435	2	23999620
3	23896091	3	23948893	3	24001061
4	23897566	4	23950351	4	24002501
5	23899041	5	23951808	5	24003941
6	23900515	6	23953264	6	24005380
7	23902089	7	23954721	7	24006819
8	23903463	8	23956176	8	24008257
9	23904936	9	23957631	9	24009695
10	23906408	10	23959086	10	24011133
11	23907880	11	23960540	11	24012569
246	23909351	249	23961994	252	24014006
1	23910822	1	23963447	1	24015442
2	23912293	2	23964900	2	24016877
3	23913763	3	23966354	3	24018312
4	23915232	4	23967804	4	24019747
5	23916701	5	23969255	5	24021181
6	23918170	6	23970706	6	24022614
7	23919638	7	23972156	7	24024047
8	23921105	8	23973606	8	24025480
9	23922572	9	23975055	9	24026912
10	23924040	10	23976504	10	24028344
11	23925505	11	23977953	11	24029775

253	24031206	256	24082400	259	24132998
1	24032636	1	24083814	1	24134395
2	24034066	2	24085227	2	24135792
3	24035495	3	24086639	3	24137188
4	24036924	4	24088051	4	24138584
5	24038352	5	24089463	5	24139979
6	24039780	6	24090874	6	24141374
7	24041207	7	24092285	7	24142768
8	24042634	8	24093695	8	24144162
9	24044061	9	24095105	9	24145556
10	24045487	10	24096514	10	24146949
11	24046913	11	24097923	11	24148342
254	24048338	257	24099332	260	24149734
1	24049762	1	24100740	1	24151126
2	24051186	2	24102147	2	24152517
3	24052610	3	24103554	3	24153908
4	24054033	4	24104961	4	24155298
5	24055456	5	24106367	5	24156688
6	24056878	6	24107773	6	24158078
7	24058300	7	24109178	7	24159467
8	24059721	8	24110583	8	24160855
9	24061142	9	24111987	9	24162244
10	24062563	10	24113391	10	24163631
11	24063983	11	24114795	11	24165019
255	24065402	258	24116197	261	24166406
1	24066821	1	24117600	1	24167792
2	24068240	2	24119002	2	24169178
3	24069658	3	24120404	3	24170563
4	24071076	4	24121805	4	24171949
5	24072493	5	24123206	5	24173333
6	24073909	6	24124606	6	24174717
7	24075326	7	24126006	7	24176101
8	24076742	8	24127405	8	24177484
9	24078157	9	24128804	9	24178867
10	24079572	10	24130202	10	24180250
11	24080986	11	24131601	11	24181632

262	24183013	265	24232459	268	24281343
1	24184394	1	24233825	1	24282699
2	24185775	2	24235189	2	24284048
3	24187155	3	24236554	3	24285398
4	24188535	4	24237919	4	24286747
5	24189915	5	24239182	5	24288095
6	24191294	6	24240646	6	24289443
7	23192672	7	24242009	7	24290791
8	24194050	8	24243371	8	24292138
9	24195428	9	24244731	9	24293485
10	24196805	10	24246095	10	24294832
11	24198182	11	24247456	11	24296178
263	24199558	266	24248817	269	24297523
1	24200934	1	24250177	1	24298868
2	24202309	2	24251537	2	24300213
3	24203684	3	24252897	3	24301558
4	24205059	4	24254256	4	24302901
5	24206433	5	24255614	5	24304245
6	24207807	6	24256973	6	24305588
7	24209180	7	24258330	7	24306931
8	24210553	8	24259688	8	24308273
9	24211925	9	24261045	9	24309615
10	24213297	10	24262401	10	24310956
11	24214669	11	24263757	11	24212297
264	24216040	267	24265113	270	24313638
1	24217410	1	24266468	1	24314978
2	24218781	2	24267823	2	24316318
3	24220150	3	24269178	3	24317657
4	24221520	4	24270532	4	24318996
5	24222889	5	24271885	5	24320335
6	24224257	6	24273278	6	24321673
7	24225625	7	24274591	7	24323011
8	24226993	8	24275943	8	24324348
9	24228360	9	24277295	9	24325685
10	24229727	10	24278647	10	24327022
11	24231093	11	24279998	11	24328358

271	24329693	274	24377506	277	24424798
1	24331029	1	24378827	1	24426104
2	24332363	2	24380147	2	24427410
3	24333698	3	24381467	3	24428716
4	24335032	4	24382736	4	24430021
5	24336366	5	24384105	5	24431326
6	24337699	6	24385424	6	24432630
7	24339032	7	24386742	7	24433931
8	24340364	8	24388060	8	24435238
9	24341696	9	24389377	9	24436541
10	24343028	10	24390694	10	24437844
11	24344359	11	24392011	11	24439146
272	24345689	275	24393327	278	24440448
1	24347020	1	24394643	1	24441750
2	24348350	2	24395959	2	24443051
3	24349679	3	24397274	3	24444352
4	24351008	4	24398588	4	24445653
5	24352337	5	24399903	5	24446953
6	24353666	6	24401216	6	24448252
7	24354993	7	24402530	7	24449552
8	24356321	8	24403843	8	24450851
9	24357648	9	24405156	9	24452149
10	24358975	10	24406468	10	24453447
11	24360301	11	24407730	11	24454745
273	24361627	276	24409091	279	24456042
1	24362952	1	24410402	1	24457339
2	24364277	2	24411713	2	24458636
3	24365602	3	24413023	3	24459932
4	24366926	4	24414333	4	24461228
5	24368250	5	24415643	5	24462523
6	24369574	6	24416952	6	24463819
7	24370897	7	24418261	7	24465113
8	24372219	8	24419569	8	24466407
9	24373542	9	24420877	9	24467701
10	24374864	10	24422184	10	24468994
11	24376185	11	24423491	11	24470288

280	24471581	283	24517865	286	24563661
1	24472873	1	24519143	1	24564926
2	24474165	2	24520422	2	24566191
3	24475457	3	24521700	3	24567455
4	24476748	4	24522977	4	24568720
5	24478039	5	24524254	5	24569983
6	24479329	6	24525531	6	24571247
7	24480619	7	24526807	7	24572510
8	24481909	8	24528083	8	24573772
9	24483198	9	24529359	9	24575035
10	24484487	10	24530634	10	24576297
11	24485776	11	34531909	11	24577559
281	24487064	284	24533184	287	24578819
1	24488351	1	24534458	1	24580080
2	24489639	2	24535732	2	24581341
3	24490926	3	24537005	3	24582601
4	24492212	4	24538278	4	24583860
5	24493499	5	24539551	5	24585120
6	24494784	6	24540823	6	24586379
7	24496070	7	24542095	7	23587638
8	14497355	8	24543367	8	24588896
9	24498640	9	24544638	9	24590154
10	24499924	10	24545909	10	24591411
11	24501208	11	24547179	11	24592669
282	24502491	285	24548449	288	24593925
1	24503775	1	24549719	1	24595182
2	24505057	2	24550988	2	24596438
3	24506340	3	24552257	3	24597694
4	24507622	4	24553526	4	24598949
5	24508904	5	24554794	5	24600204
6	24510185	6	24556062	6	24601459
7	24511466	7	24557329	7	24602713
8	24512746	8	24558596	8	24603967
9	24514027	9	24559863	9	24605220
10	24515306	10	24561129	10	24606474
11	24516586	11	24562395	11	24607726

289	24608979	292	24653829	295	24698221
1	24610231	1	24655068	1	24699447
2	24611483	2	24656307	2	24700674
3	24612734	3	23657546	3	24701900
4	24613985	4	24658784	4	24703125
5	24615236	5	24660022	5	24704350
6	24616486	6	24661259	6	24705575
7	24617736	7	24662496	7	24706800
8	24618986	8	24663733	8	24708024
9	24620235	9	24664969	9	24709248
10	24621484	10	24666205	10	24710471
11	24622732	11	24667441	11	24711695
290	24623980	293	24668677	296	24712918
1	24625288	1	24669912	1	24714140
2	24626476	2	24671146	2	24715362
3	24627723	3	24672381	3	24716584
4	24628969	4	24673615	4	24717806
5	24630216	5	24674848	5	24719027
6	24631462	6	24176082	6	24720247
7	24632707	7	24677314	7	24721468
8	24633953	8	24678547	8	24722688
9	24635298	9	24679779	9	24723908
10	24636442	10	24681011	10	24725127
11	24637686	11	24682243	11	24726346
291	24638930	294	24683474	297	24727565
1	24640174	1	24684705	1	24728783
2	24641417	2	24685936	2	24730001
3	24642660	3	24687165	3	24731219
4	24643902	4	24688395	4	24732436
5	24645144	5	24689624	5	24733653
6	24646386	6	24690853	6	24734870
7	24647627	7	24692082	7	24736086
8	24648818	8	24693311	8	24737302
9	24650109	9	24694539	9	24738518
10	24651349	10	24695766	10	24739733
11	24652589	11	24696994	11	24740948

298	24742163	301	24785665	304	24828736
1	24743377	1	24786868	1	24829927
2	24744591	2	24788069	2	24831117
3	24745805	3	24789271	3	24832306
4	24747018	4	24790472	4	24833496
5	24748231	5	24791673	5	24834685
6	24749444	6	24792874	6	24835873
7	24750656	7	24794074	7	24837062
8	24751868	8	24795274	8	24838250
9	24753080	9	24796473	9	24839438
10	24754291	10	24797672	10	24840625
11	24755502	11	24798871	11	24841812
299	24756712	302	24800070	305	24842999
1	24757923	1	24801268	1	24844185
2	24759132	2	24802466	2	24845371
3	24760342	3	24803664	3	24846557
4	24761551	4	24804861	4	24847743
5	24762760	5	24806058	5	24848928
6	24763969	6	24807254	6	24850113
7	24765177	7	24808450	7	24851297
8	24766385	8	24809646	8	24852481
9	24767592	9	24810842	9	24853665
10	24768800	10	24812037	10	24854849
11	24770006	11	24813232	11	24856032
300	24771213	303	24814527	306	24857215
1	24772419	1	24815621	1	24858397
2	24773625	2	24816815	2	24859580
3	24774831	3	24818008	3	24860761
4	24776036	4	24819202	4	24861943
5	24777241	5	24820395	5	24863124
6	24778445	6	24821587	6	24864305
7	24779649	7	24822780	7	24865486
8	24780853	8	24823972	8	24866666
9	24782057	9	24825163	9	24867846
10	24783260	10	24826355	10	24869026
11	24784463	11	24827546	11	24870205

307	24871384	310	24913617	313	24955444
1	24872563	1	24914785	1	24956600
2	24873741	2	24915952	2	24957756
3	24874919	3	24917118	3	24958911
4	24876097	4	24918285	4	24960066
5	24877275	5	24919451	5	24961221
6	24878452	6	24920616	6	24962376
7	24879628	7	24921782	7	24963530
8	24880805	8	24922947	8	24964684
9	24881981	9	24924112	9	24965838
10	24883157	10	24925275	10	24966991
11	24884332	11	24926440	11	24968144
308	24885508	311	24927604	314	24969297
1	24886682	1	24928768	1	24970449
2	24887857	2	24929931	2	24971601
3	24889031	3	24931094	3	24972753
4	24890205	4	24932257	4	24973905
5	24891380	5	24933419	5	24975056
6	24892552	6	24934581	6	24976207
7	24893725	7	24935743	7	24977357
8	24894898	8	24936904	8	24978509
9	24896070	9	24938065	9	24979658
10	24897242	10	24939226	10	24980808
11	24898414	11	24940386	11	24981957
309	24899585	312	24941546	315	24983105
1	24900756	1	24942706	1	24984255
2	24901927	2	24943866	2	24985403
3	24903098	3	24945025	3	24986551
4	24904268	4	24946184	4	24987699
5	24905437	5	24947342	5	24988847
6	24906607	6	24948501	6	24989994
7	24907776	7	24949659	7	24991141
8	24908945	8	24950816	8	24992288
9	24910114	9	24951974	9	24993434
10	24911282	10	24953131	10	24994580
11	24912450	11	24954287	11	24995726

316	24996871	319	25037907	322	25078559
1	24998016	1	25039042	1	25079683
2	24999161	2	25040176	2	25080806
3	25000306	3	25041310	3	25081930
4	25001450	4	25042443	4	25083053
5	25002594	5	25043576	5	25084175
6	25003738	6	25044709	6	25085298
7	25004881	7	25045842	7	25086420
8	25006024	8	25046974	8	25087541
9	25007167	9	25048106	9	25088663
10	25008309	10	25049238	10	25089784
11	25009451	11	25040369	11	25090905
317	25010593	320	25051500	323	25092026
1	25011735	1	25052631	1	25093146
2	25012876	2	25053762	2	25094266
3	25014017	3	25054892	3	25095386
4	25015157	4	25056022	4	25096505
5	25016298	5	25057151	5	25097624
6	25017438	6	25058281	6	25098743
7	25018577	7	25059410	7	25099862
8	25019717	8	25060539	8	25100980
9	25020856	9	25061667	9	25102098
10	25021995	10	25062795	10	25103216
11	25023133	11	25063923	11	25104333
318	25024272	321	25065051	324	25105450
1	25025410	1	25066178	1	25106567
2	25026547	2	25067305	2	25107684
3	25027685	3	25068432	3	25108800
4	25028822	4	25069558	4	25109916
5	25029958	5	25070684	5	25111032
6	25031095	6	25071804	6	25112147
7	25032231	7	25072936	7	25113263
8	25033367	8	25074061	8	25114377
9	25034582	9	25075186	9	25115492
10	25035638	10	25076311	10	25116606
11	25036773	11	25077435	11	25117720

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325	25118834	328	25158739	331	25198280
1	25119947	1	25159842	1	25199374
2	25121061	2	25160945	2	25200467
3	25122173	3	25162048	3	25201559
4	25123282	4	25163150	4	25202652
5	25124398	5	25164252	5	25203744
6	25125510	6	25165354	6	25204836
7	25126622	7	25166456	7	25205927
8	25127734	8	25167557	8	25207019
9	25128845	9	25168658	9	25208110
10	25129956	10	25169759	10	25209201
11	25131066	11	25170859	11	25210291
326	25132176	329	25171959	332	25211381
1	25133286	1	25173059	1	25212471
2	25134396	2	25174159	2	25213561
3	25135506	3	25175258	3	25214650
4	25136615	4	25176357	4	25215739
5	25137724	5	25177456	5	25216828
6	25138832	6	25178555	6	25217917
7	25139941	7	25179653	7	25219005
8	25141049	8	25180751	8	25220093
9	25142156	9	25181848	9	25221181
10	25143264	10	25182946	10	25222268
11	25144371	11	25184043	11	25223356
327	25145478	330	25185140	333	25224443
1	25146585	1	25186236	1	25225529
2	25147691	2	25187333	2	25226616
3	25148797	3	25188429	3	25227702
4	25149903	4	25189524	4	25228788
5	25151008	5	25190611	5	25229873
6	25152113	6	25191715	6	25230959
7	25153218	7	25192810	7	25232044
8	25154323	8	25193905	8	25233129
9	25155427	9	25194999	9	25234213
10	25156532	10	25196093	10	25235297
11	25157635	11	25197187	11	25236381

334	25237465	337	25276299	340	25314790
1	25238549	1	25277373	1	25315854
2	25239632	2	25278447	2	25316918
3	25240715	3	25279520	3	25317982
4	25241797	4	25280593	4	25319045
5	25242880	5	25281666	5	25320109
6	25243962	6	25282738	6	25321172
7	25245043	7	25283810	7	25322234
8	25246125	8	25284882	8	25323297
9	25247206	9	25285954	9	25324359
10	25248287	10	25287025	10	25325421
11	25249368	11	25288097	11	25326483
335	25250449	338	25289167	341	25327544
1	25251529	1	25290238	1	25328605
2	25252609	2	25291308	2	25329666
3	25253688	3	25292378	3	25330727
4	25254768	4	25293448	4	25331787
5	25255847	5	25294518	5	25332848
6	25256926	6	25295587	6	25333908
7	25258004	7	25296656	7	25334967
8	25259083	8	25297725	8	25336027
9	25260161	9	25298793	9	25337086
10	25261238	10	25299862	10	25338145
11	25262316	11	25300930	11	25339203
336	25263393	339	25301997	342	25340261
1	25264470	1	25303065	1	25341320
2	25265547	2	25304132	2	25342377
3	25266623	3	25305199	3	25343435
4	25267700	4	25306266	4	25344492
5	25268775	5	25307332	5	25345549
6	25269851	6	25308398	6	25346606
7	25270926	7	25309464	7	25347663
8	25272002	8	25310530	8	25348719
9	25273076	9	25311595	9	25349775
10	25274151	10	25312660	10	25350830
11	25275225	11	25313725	11	25351886

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343	25352942	346	25390761	349	25428255
1	25353997	1	25391807	1	25429292
2	25355051	2	25392853	2	25430328
3	25356106	3	25393898	3	25431365
4	25357160	4	25394943	4	25432401
5	25358214	5	25395988	5	25433437
6	25359268	6	25397033	6	25434472
7	25360321	7	25398077	7	25435508
8	25361375	8	25399121	8	25436543
9	25362428	9	25400165	9	25437578
10	25363480	10	25401209	10	25438612
11	25364533	11	25402252	11	25439647
344	25365585	347	25403295	350	25440681
1	25366637	1	25404338	1	25441715
2	25367689	2	25405381	2	25442748
3	25368740	3	25406423	3	25443782
4	25369791	4	25407465	4	25444815
5	25370842	5	25408507	5	25445848
6	25371893	6	25409548	6	25446881
7	25372943	7	25410590	7	25447913
8	25373993	8	25411631	8	25448945
9	25375043	9	25412672	9	25449977
10	25376093	10	25413712	10	25451009
11	25377142	11	25414753	11	25452040
345	25378191	348	25415793	351	25453071
1	25379240	1	25416833	1	25454103
2	25380289	2	25417872	2	25455133
3	25381337	3	25418912	3	25456164
4	25382385	4	25419951	4	25457194
5	25383433	5	25420990	5	25458224
6	25384481	6	25422028	6	25459254
7	25385528	7	25423067	7	25460283
8	25386575	8	25424105	8	25461312
9	25387622	9	25425143	9	25462341
10	25388669	10	25426180	10	25463370
11	25389715	11	25427218	11	25464399

352	25465437	355	25502284	358	25538831
1	25466455	1	25503303	1	25539841
2	25467483	2	25504322	2	25540852
3	25468510	3	25505341	3	25541862
4	25469538	4	25506360	4	25542873
5	25470565	5	25507378	5	25543882
6	25471592	6	25508386	6	25544892
7	25472618	7	25509414	7	25545901
8	25473645	8	25510432	8	25546911
9	25474671	9	25511450	9	25547920
10	25475697	10	25512467	10	25548928
11	25476722	11	25513484	11	25549937
353	25477747	356	25514500	359	25550945
1	25478773	1	25515517	1	25551953
2	25479798	2	25516533	2	25552961
3	25480822	3	25517549	3	25553968
4	25481847	4	25518565	4	25554976
5	25482871	5	25519580	5	25555983
6	25483894	6	25520596	6	25556989
7	25484918	7	25521611	7	25557996
8	25485942	8	25522626	8	25558902
9	25486965	9	25523640	9	25559908
10	25487988	10	25524655	10	25560914
11	25489011	11	25525669	11	25561920
354	25490033	357	25526683	360	25563025
1	25491055	1	25527696	1	25564031
2	25492077	2	25528710	2	25565036
3	25493099	3	25529723	3	25566040
4	25494121	4	25530736	4	25567045
5	25495142	5	25531748	5	25568049
6	25496163	6	25532761	6	25569053
7	25497184	7	25533773	7	25570057
8	25498204	8	25534785	8	25571060
9	25499224	9	25535797	9	25572064
10	25500245	10	25536808	10	25573068
11	25501264	11	25537820	11	25574070

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361	25575072	364	25611014	367	25646661
1	25576075	1	25612008	1	25647647
2	25577077	2	25613002	2	25648633
3	25578079	3	25613996	3	25649618
4	25579081	4	25614990	4	25650604
5	25580082	5	25615983	5	25651589
6	25581083	6	25616976	6	25652574
7	25582084	7	25617969	7	25653559
8	25583085	8	25618961	8	25654543
9	25584086	9	25619953	9	25655527
10	25585086	10	25620946	10	25656511
11	25586086	11	25621937	11	25657495
362	25587086	365	25622929	368	25658479
1	25588086	1	25623921	1	25659462
2	25589085	2	25624912	2	25660445
3	25590084	3	25625903	3	25661428
4	25591083	4	25626893	4	25662411
5	25592082	5	25627884	5	25663393
6	25593081	6	25628874	6	25664375
7	25594079	7	25629864	7	25665357
8	25595077	8	25630854	8	25666339
9	25596075	9	25631844	9	25667321
10	25597072	10	25632833	10	25668302
11	25598070	11	25633822	11	25669283
363	25599067	366	25634811	369	25670264
1	25600064	1	25635800	1	25671245
2	25601060	2	25636789	2	25672225
3	25602057	3	25637777	3	25673205
4	25603053	4	25638765	4	25674185
5	25604049	5	25639753	5	25675165
6	25605045	6	25640740	6	25676145
7	25606040	7	25641728	7	25677124
8	25607035	8	25642715	8	25678103
9	25608030	9	25643702	9	25679082
10	25609025	10	25644688	10	25680061
11	25610020	11	25645675	11	25681039

370	25682018	373	25717089	376	25751879
1	25682996	1	25718059	1	25752841
2	25683973	2	25719029	2	25753814
3	25684951	3	25719999	3	25754766
4	25685928	4	25720968	4	25755727
5	25686906	5	25721938	5	25756689
6	25687883	6	25722907	6	25757650
7	25688859	7	25723875	7	25758611
8	25689836	8	25724854	8	25759572
9	25690812	9	25725812	9	25760533
10	25691788	10	25726781	10	25761494
11	25692764	11	25727749	11	25762454
371	25693740	374	25728716	377	25763414
1	35694715	1	25729684	1	25764374
2	25695690	2	25730651	2	25765333
3	25696665	3	25731618	3	25766293
4	25697640	4	25732585	4	25767254
5	25698614	5	25733552	5	25768211
6	25699589	6	25734519	6	25769170
7	25700563	7	25735485	7	25770129
8	25701537	8	25736451	8	25771087
9	25702510	9	25737417	9	25772045
10	25703484	10	25738383	10	25773003
11	25704457	11	25739348	11	25773961
372	25705430	375	25740313	378	25774918
1	25706403	1	25741278	1	25775876
2	25707375	2	25742243	2	25776833
3	25708348	3	25743207	3	25777778
4	25709320	4	25744172	4	25778746
5	25710292	5	25745136	5	25779703
6	25711263	6	25746100	6	25780659
7	25712235	7	25747064	7	25781615
8	25713206	8	25748027	8	25782571
9	25714177	9	25748990	9	25783527
10	25715148	10	25749953	10	25784482
11	25716118	11	25750916	11	25785438

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379	25786393	382	25820633	385	25854608
1	25787347	1	25821581	1	25855548
2	25788302	2	25822528	2	25856487
3	25789256	3	25823475	3	25857427
4	25790211	4	25824422	4	25858363
5	25791164	5	25825369	5	25859305
6	25792118	6	25826315	6	25860244
7	25793072	7	25827261	7	25861183
8	25794025	8	25828207	8	25862121
9	25794978	9	25829152	9	25863061
10	25795931	10	25830098	10	25863998
11	25796884	11	25831043	11	25864936
380	25797836	383	25831988	386	25865873
1	25798789	1	25832933	1	25866811
2	25799741	2	25833878	2	25867748
3	25800693	3	25834822	3	25868685
4	25801644	4	25835766	4	25869622
5	25802596	5	25836711	5	25870559
6	25803547	6	25837654	6	25871495
7	25804498	7	25838598	7	25872432
8	25805449	8	25839541	8	25873368
9	25806400	9	25840484	9	25874304
10	25807350	10	25841427	10	25875239
11	25808300	11	25842360	11	25876175
381	25809250	384	25843313	387	25877110
1	25810200	1	25844255	1	25878045
2	25811150	2	25845197	2	25878980
3	25812099	3	25846139	3	25879915
4	25813048	4	25847081	4	25880849
5	25813997	5	25848023	5	25881783
6	25814946	6	25848964	6	25882718
7	25815894	7	25849905	7	25883651
8	25816843	8	25850846	8	25884585
9	25817791	9	25851787	9	25885519
10	25818739	10	25852727	10	25886452
11	25819687	11	25853668	11	25887385

388	25888318	391	25921768	394	25954963
1	25889250	1	25922694	1	25955881
2	25890183	2	25923619	2	25956799
3	25891115	3	25924544	3	25957717
4	25892047	4	25925469	4	25958635
5	25892979	5	25926394	5	25959553
6	25893911	6	25927318	6	25960471
7	25894842	7	25928242	7	25961388
8	25895773	8	25929167	8	25962305
9	25896704	9	25930091	9	25963222
10	25897635	10	25931014	10	25964139
11	25898566	11	25931938	11	25965055
389	25899496	392	25932861	395	25965971
1	25900427	1	25933784	1	25966888
2	25901357	2	25934707	2	25967803
3	25902287	3	25935630	3	25968719
4	25903216	4	25936553	4	25969635
5	25904146	5	25937475	5	25970550
6	25905075	6	25938397	6	25971465
7	25906004	7	25939319	7	25972380
8	25906933	8	25940241	8	25973294
9	25907862	9	25941162	9	25974210
10	25908790	10	25942084	10	25975124
11	25909718	11	25943005	11	25976038
390	25910647	393	25943926	396	25976952
1	25911574	1	25944847	1	25977866
2	25912502	2	25945767	2	25978780
3	25913430	3	25946688	3	25979693
4	25914357	4	25947608	4	25980606
5	25915284	5	25948528	5	25981520
6	25916211	6	25949448	6	25982432
7	25917138	7	25950367	7	25983345
8	25918064	8	25951287	8	25984257
9	25918990	9	25952206	9	25985170
10	25919916	10	25953125	10	25986082
11	25920842	11	25954044	11	25986994

397	25987906	400	26020600	403	26053051
1	25988817	1	26021505	1	26053949
2	25989728	2	26022410	2	26054847
3	25990640	3	26023314	3	26055744
4	25991550	4	26024218	4	26056642
5	25992461	5	26025122	5	26057539
6	25993372	6	26026026	6	26058436
7	25994282	7	26026930	7	26059333
8	25995192	8	26027833	8	26060229
9	25996102	9	26028736	9	26061126
10	25997012	10	26029639	10	26062022
11	25997922	11	26030542	11	26062918
398	25998831	401	26031444	404	26063814
1	25999740	1	26032347	1	26064710
2	26000649	2	26033249	2	26065605
3	26001558	3	26034151	3	26066501
4	26002467	4	26035053	4	26067396
5	26003375	5	26035954	5	26068291
6	26004284	6	26036856	6	26069186
7	26005192	7	26037757	7	26070080
8	26006100	8	26038658	8	26070975
9	26007007	9	26039559	9	26071869
10	26007915	10	26040460	10	26072763
11	26008822	11	26041361	11	26073657
399	26009729	402	26042261	405	26074551
1	26010636	1	26043161	1	26075444
2	26011543	2	26044061	2	26076337
3	26012450	3	26044961	3	26077231
4	26013356	4	26045861	4	26078124
5	26014262	5	26046760	5	26079016
6	26015168	6	26047659	6	26079909
7	26016074	7	26048558	7	26080801
8	26016980	8	26049457	8	26081694
9	26017885	9	26050356	9	26082586
10	26018790	10	26051254	10	26083478
11	26019695	11	26052153	11	26084369

406	26085261	409	26117234	412	26148973
1	26086152	1	26118118	1	26149851
2	26087043	2	26119003	2	26150729
3	26087934	3	26119887	3	26151607
4	26088825	4	26120772	4	26152485
5	26089716	5	26121655	5	26153362
6	26090606	6	26122540	6	26154240
7	26091496	7	26123423	7	26155117
8	26092386	8	26124307	8	26155994
9	26093276	9	26125190	9	26156871
10	26094166	10	26126073	10	26157748
11	26095055	11	26126956	11	26158625
407	26095944	410	26127839	413	26159501
1	26096834	1	26128722	1	26160377
2	26097723	2	26129604	2	26161253
3	26098611	3	26130486	3	26162129
4	26099500	4	26131368	4	26163005
5	26100388	5	26132250	5	26163880
6	26101277	6	26133132	6	26164756
7	26102165	7	26134013	7	26165631
8	26103052	8	26134895	8	26166506
9	26103940	9	26135776	9	26167381
10	26104828	10	26136657	10	26168255
11	26105715	11	26137538	11	26169130
408	26106602	411	26138419	414	26170004
1	26107489	1	26139299	1	26170878
2	26108376	2	26140179	2	26171752
3	26109262	3	26141060	3	26172626
4	26110149	4	26141940	4	26173499
5	26111035	5	26142819	5	26174373
6	26111921	6	26143699	6	26175246
7	26112807	7	26144578	7	26176119
8	26113693	8	26145457	8	26176992
9	26114578	9	26146336	9	26177864
10	26115463	10	26147215	10	26178737
11	26116349	11	26148094	11	26179609

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415	26180481	418	26211763	421	26242821
1	26181353	1	26212629	1	26243681
2	26182225	2	26213495	2	26244540
3	26183097	3	26214360	3	26245400
4	26183968	4	26215225	4	26246259
5	26184840	5	26216090	5	26247117
6	26185711	6	26216955	6	26247976
7	26186582	7	26217820	7	26248835
8	26187452	8	26218684	8	26249693
9	26188323	9	26219549	9	26250551
10	26189193	10	26220413	10	26251409
11	26190064	11	26221277	11	26252267
416	26190934	419	26222140	422	26253125
1	26191804	1	26223004	1	26253982
2	26192673	2	26223868	2	26254840
3	26193543	3	26224731	3	26255697
4	26194412	4	26225594	4	26256554
5	26195281	5	26226458	5	26257411
6	26196151	6	26227320	6	26258268
7	26197019	7	26228183	7	26259124
8	26197888	8	26229045	8	26259980
9	26198757	9	26229907	9	26260837
10	26199625	10	26230770	10	26261693
11	26200493	11	26231632	11	26262548
417	26201361	420	26232493	423	26263404
1	26202229	1	26233365	1	26264260
2	26203096	2	26234216	2	26265115
3	26203964	3	26235078	3	26265970
4	26204831	4	26235939	4	26266825
5	26205698	5	26236800	5	26267680
6	26206565	6	26237660	6	26268535
7	26207432	7	26238521	7	26269389
8	26208299	8	26239381	8	26270243
9	26209165	9	26240242	9	26271098
10	26210031	10	26241102	10	26271952
11	26210897	11	26241962	11	26272805

424	26273659	427	26304279	430	26334685
1	26274512	1	26305127	1	26335527
2	26275366	2	26305974	2	26336368
3	26276218	3	26306821	3	26337209
4	26277072	4	26307668	4	26338050
5	26277925	5	26308515	5	26338891
6	26278777	6	26309362	6	26339732
7	26279630	7	26310208	7	26340573
8	26280482	8	26311054	8	26341413
9	26281334	9	26311901	9	26342253
10	26282186	10	26312747	10	26343093
11	26283038	11	26313592	11	26343933
425	26283890	428	26314438	431	26344773
1	26284741	1	26315284	1	26345613
2	26285593	2	26316129	2	26346452
3	26286444	3	26316974	3	26347292
4	26287295	4	26317819	4	26348131
5	26288145	5	26318664	5	26348970
6	26288996	6	26319509	6	26349808
7	26289847	7	26320353	7	26350647
8	26290697	8	26321198	8	26351486
9	26291547	9	26322042	9	26352324
10	26292397	10	26322886	10	26353162
11	26293247	11	26323730	11	26354000
426	26294096	429	26324573	432	26354838
1	26294946	1	26325417	1	26355676
2	26295795	2	26326260	2	26356513
3	26296644	3	26327103	3	26357350
4	26297493	4	26327947	4	26358188
5	26298342	5	26328789	5	26359025
6	26299191	6	26329632	6	26359862
7	26300039	7	26330475	7	26360698
8	26300888	8	26331317	8	26361535
9	26301736	9	26332159	9	26362371
10	26302584	10	26333001	10	26363207
11	26303432	11	26333843	11	26364044

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433	26364879	436	26394865	439	26424646
1	26365715	1	26395695	1	26425470
2	26366551	2	26396525	2	26426294
3	26367386	3	26397355	3	26427118
4	26368221	4	26398184	4	26427942
5	26369057	5	26399014	5	26428766
6	26369891	6	26399843	6	26429589
7	26370726	7	26400672	7	26430413
8	26371561	8	26401501	8	26431236
9	26372395	9	26402330	9	26432059
10	26373230	10	26403158	10	26432882
11	26374064	11	26403987	11	26433705
434	26374898	437	26404815	440	26434527
1	26375732	1	26405643	1	26435350
2	26376565	2	26406471	2	26436172
3	26377399	3	26407299	3	26436994
4	26378232	4	26408126	4	26437816
5	26379065	5	26408954	5	26438638
6	26379898	6	26409781	6	26439460
7	26380731	7	26410608	7	26440281
8	26381564	8	26411435	8	26441102
9	26382396	9	26412262	9	26441924
10	26383229	10	26413089	10	26442745
11	26384061	11	26413915	11	26443566
435	26384893	438	26414742	441	26444386
1	26385725	1	26415568	1	26445207
2	26386557	2	26416394	2	26446027
3	26387388	3	26417220	3	26446848
4	26388220	4	26418045	4	26447668
5	26389051	5	26418871	5	26448488
6	26389882	6	26419696	6	26449308
7	26390713	7	26420522	7	26450127
8	26391544	8	26421347	8	26450947
9	26392374	9	26422172	9	26451766
10	26393205	10	26422997	10	26452585
11	26394035	11	26423821	11	26453404

442	26454223	445	26483601	448	26512781
1	26455042	1	26484414	1	26513588
2	26455860	2	26485227	2	26514396
3	26456679	3	26486040	3	26515203
4	26457497	4	26486852	4	26516011
5	26458315	5	26487665	5	26516818
6	26459133	6	26488478	6	26517625
7	26459951	7	26489289	7	26518432
8	26460769	8	26490102	8	26519239
9	26461586	9	26490914	9	26520045
10	26462403	10	26491726	10	26520851
11	26463221	11	26492537	11	26521658
443	26464038	446	26493349	449	26522464
1	26464855	1	26494160	1	26523270
2	26465671	2	26494972	2	26524076
3	26466488	3	26495783	3	26524881
4	26467304	4	26496594	4	26525687
5	26468121	5	26497404	5	26526492
6	26468937	6	26498215	6	26527297
7	26469753	7	26499026	7	26528102
8	26470568	8	26499836	8	26528907
9	26471384	9	26500646	9	26529712
10	26472200	10	26501456	10	26530517
11	26473015	11	26502266	11	26531321
444	26473830	447	26503076	450	26532126
1	26474645	1	26503885	1	26532930
2	26475460	2	26504695	2	26533734
3	26476275	3	26505504	3	26534538
4	26477089	4	26506313	4	26535341
5	26477904	5	26507122	5	26536145
6	26478719	6	26507931	6	26536948
7	26479532	7	26508739	7	26537752
8	26480346	8	26509548	8	26538555
9	26481160	9	26510356	9	26539358
10	26481974	10	26511165	10	26540161
11	26482787	11	26511973	11	26540963

451	26541766	454	26570559	457	26599162
1	26542568	1	26571356	1	26599954
2	26543370	2	26572153	2	26600746
3	26544173	3	26572950	3	26601538
4	26544975	4	26573746	4	26602329
5	26545776	5	26574543	5	26603120
6	26546578	6	26575339	6	26603911
7	26547379	7	26576136	7	26604702
8	26548181	8	26576932	8	26605493
9	26548982	9	26577728	9	26606284
10	26549783	10	26578523	10	26607074
11	26550584	11	26579319	11	26607865
452	26551385	455	26580114	458	26608655
1	26552185	1	26580910	1	26609445
2	26552986	2	26581705	2	26610235
3	26553786	3	26582500	3	26611025
4	26554586	4	26583395	4	26611815
5	26555386	5	26584190	5	26612604
6	26556186	6	26584984	6	26613394
7	26556986	7	26585779	7	26614183
8	26557786	8	26586473	8	26614972
9	26558585	9	26587267	9	26615761
10	26559384	10	26588061	10	26616550
11	26560183	11	26588855	11	26617339
453	26560982	456	26589649	459	26618127
1	26561781	1	26590442	1	26618916
2	26562580	2	26591236	2	26619704
3	26563379	3	26592029	3	26620492
4	26564177	4	26592822	4	26621280
5	26564975	5	26593615	5	26622068
6	26565773	6	26594408	6	26622856
7	26566571	7	26595201	7	26623643
8	26567369	8	26595994	8	26624431
9	26568167	9	26596786	9	26625218
10	26568964	10	26597578	10	26626005
11	26569762	11	26598370	11	26626792

460	26627579	463	26655810	466	26683860
1	26628365	1	26656592	1	26684636
2	26629152	2	26657373	2	26685413
3	26629938	3	26658155	3	26686189
4	26630725	4	26658936	4	26686966
5	26631511	5	26659717	5	26687741
6	26632297	6	26660498	6	26688517
7	26633083	7	26661279	7	26689293
8	26633868	8	26662059	8	26690068
9	26634654	9	26662840	9	26690844
10	26635439	10	26663620	10	26691619
11	26636225	11	26664400	11	26692394
461	26637010	464	26665180	467	26693169
1	26637795	1	26665960	1	26693944
2	26638580	2	26666740	2	26694719
3	26639364	3	26667520	3	26695494
4	26640149	4	26668299	4	26696268
5	26640933	5	26669078	5	26697042
6	26641718	6	26669858	6	26697817
7	26642502	7	26670637	7	26698591
8	26643286	8	26671416	8	26699365
9	26644069	9	26672194	9	26700138
10	26644853	10	26672973	10	26700912
11	26645637	11	26673752	11	26701686
462	26646420	465	26674530	468	26702459
1	26647203	1	26675308	1	26703232
2	26647987	2	26676086	2	26704005
3	26648770	3	26676864	3	26704778
4	26649553	4	26677642	4	26705551
5	26650335	5	26678420	5	26706324
6	26651118	6	26679197	6	26707096
7	26651900	7	26679975	7	26707869
8	26652683	8	26680752	8	26708641
9	26653465	9	26681529	9	26709413
10	26654247	10	26682306	10	26710185
11	26655029	11	26683083	11	26710957

469	26711729	472	26739420	475	26766937
1	26712500	1	26740187	1	26767698
2	26713272	2	26740954	2	26768461
3	26714043	3	26741720	3	26769222
4	26714814	4	26742486	4	26769983
5	26715586	5	26743253	5	26770744
6	26716356	6	26744019	6	26771506
7	26717127	7	26744784	7	26772267
8	26717897	8	26745550	8	26773028
9	26718668	9	26746316	9	26773788
10	26719439	10	26747081	10	26774549
11	26720209	11	26747847	11	26775310
470	26720979	473	26748612	476	26776070
1	26721749	1	26749377	1	26776830
2	26722519	2	26750142	2	26777590
3	26723288	3	26750907	3	26778350
4	26724058	4	26751671	4	26779110
5	26724827	5	26752436	5	26779870
6	26725597	6	26753200	6	26780629
7	26726366	7	26753965	7	26781389
8	26727135	8	26754729	8	26782148
9	26727904	9	26755493	9	26782907
10	26728672	10	26756257	10	26783667
11	26729441	11	26757020	11	26784425
471	26730210	474	26757784	477	26785184
1	26730978	1	26758547	1	26785943
2	26731746	2	26759311	2	26786701
3	26732514	3	26760074	3	26787460
4	26733282	4	26760837	4	26788218
5	26734050	5	26761600	5	26788976
6	26734817	6	26762363	6	26789734
7	26735585	7	26763125	7	26790492
8	26736352	8	26763888	8	26791250
9	26737120	9	26764650	9	26792007
10	26737887	10	26765412	10	26792765
11	26738654	11	26766175	11	26793522

478	26794279	481	26821451	484	26848454
1	26795036	1	26822204	1	26849202
2	26795793	2	26822956	2	26849949
3	26796550	3	26823708	3	26850697
4	26797307	4	26824460	4	26851444
5	26798063	5	26825212	5	26852191
6	26798820	6	26825963	6	26852938
7	26799576	7	26826715	7	26853685
8	26800332	8	26827466	8	26854432
9	26801088	9	26828218	9	26855179
10	26801844	10	26828969	10	26855925
11	26802600	11	26829720	11	26856672
479	26803356	482	26830471	485	26857418
1	26804111	1	26831222	1	26858164
2	26804866	2	26831972	2	26858910
3	26805622	3	26832723	3	26859656
4	26806377	4	26833473	4	26860402
5	26807132	5	26834223	5	26861147
6	26807887	6	26834974	6	26861893
7	26808641	7	26835724	7	26862638
8	26809396	8	26836474	8	26863383
9	26810150	9	26837223	9	26864129
10	26810905	10	26837973	10	26864874
11	26811659	11	26838722	11	26865618
480	26812413	483	26839472	486	26866363
1	26813167	1	26840221	1	26867108
2	26813921	2	26840970	2	26867852
3	26814674	3	26841719	3	26868597
4	26815428	4	26842468	4	26869341
5	26816181	5	26843217	5	26870085
6	26816934	6	26843965	6	26870830
7	26817688	7	26844714	7	26871573
8	26818441	8	26845462	8	26872316
9	26819193	9	26846210	9	26873060
10	26819946	10	26846958	10	26873804
11	26820699	11	26847706	11	26874547

487	26875290	490	26901961	493	26928470
1	26876033	1	26902700	1	26929204
2	26876776	2	26903438	2	26929938
3	26877519	3	26904176	3	26930671
4	26878262	4	26904915	4	26931405
5	26879003	5	26905653	5	26932139
6	26879747	6	26906391	6	26932872
7	26880489	7	26907128	7	26933605
8	26881231	8	26907866	8	26934338
9	26881973	9	26908604	9	26935072
10	26882715	10	26909341	10	26935804
11	26883457	11	26910078	11	26936537
488	26884199	491	26910815	494	26937270
1	26884940	1	26911552	1	26938002
2	26885682	2	26912289	2	26938735
3	26886423	3	26913026	3	26939467
4	26887164	4	26913763	4	26940199
5	26887905	5	26914499	5	26940931
6	26888646	6	26915236	6	26941663
7	26889387	7	26915972	7	26942395
8	26890128	8	26916708	8	26943127
9	26890868	9	26917444	9	26943858
10	26891609	10	26918180	10	26944590
11	26892349	11	26918916	11	26945321
489	26893089	492	26919651	495	26946052
1	26893829	1	26920387	1	26946784
2	26894569	2	26921122	2	26947514
3	26895309	3	26921858	3	26948245
4	26896048	4	26922593	4	26948976
5	26896788	5	26923328	5	26949707
6	26897527	6	26924063	6	26950437
7	26898267	7	26924798	7	26951167
8	26899006	8	26925532	8	26951898
9	26899745	9	26926267	9	26952628
10	26900484	10	26927001	10	26953358
11	26901223	11	26927735	11	26954087

58 *A TABLE of LOGARITHMS.*

496	26954817	499	26981006		
1	26955547	1	26981731		
2	26956276	2	26982456		
3	26957006	3	26983181		
4	26957735	4	26983906		
5	26958464	5	26984631		
6	26959193	6	26985355		
7	26959922	7	26986080		
8	26960651	8	26986804		
9	26961379	9	26987528		
10	26962108	10	26988253		
11	26962836	11	26988977		
497	26963564	500	26989701		
1	26964292				
2	26965020				
3	26965748				
4	26966476				
5	26967204				
6	26967931				
7	26968659				
8	26969386				
9	26970113				
10	26970840				
11	26971567				
498	26972294				
1	26973021				
2	26973747				
3	26974474				
4	26975200				
5	26975926				
6	26976652				
7	26977378				
8	26978104				
9	26978830				
10	26979555				
11	26980281				

TABLE to reduce FEET to YARDS. 59

<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>
1	9	41	369	81	729	121	1089
2	18	42	378	82	738	122	1098
3	27	43	387	83	747	123	1107
4	36	44	396	84	756	124	1116
5	45	45	405	85	765	125	1125
6	54	46	414	86	774	126	1134
7	63	47	423	87	783	127	1143
8	72	48	432	88	792	128	1152
9	81	49	441	89	801	129	1161
10	90	50	450	90	810	130	1170
11	99	51	459	91	819	131	1179
12	108	52	468	92	828	132	1188
13	117	53	477	93	837	133	1197
14	126	54	486	94	846	134	1206
15	135	55	495	95	855	135	1215
16	144	56	504	96	864	136	1224
17	153	57	513	97	873	137	1233
18	162	58	522	98	882	138	1242
19	171	59	531	99	891	139	1251
20	180	60	540	100	900	140	1260
21	189	61	549	101	909	141	1269
22	198	62	558	102	918	142	1278
23	207	63	567	103	927	143	1287
24	216	64	576	104	936	144	1296
25	225	65	585	105	945	145	1305
26	234	66	594	106	954	146	1314
27	243	67	603	107	963	147	1323
28	252	68	612	108	972	148	1332
29	261	69	621	109	981	149	1341
30	270	70	630	110	990	150	1350
31	279	71	639	111	999	151	1359
32	288	72	648	112	1008	152	1368
33	297	73	657	113	1017	153	1377
34	306	74	666	114	1026	154	1386
35	315	75	675	115	1035	155	1395
36	324	76	684	116	1044	156	1404
37	333	77	693	117	1053	157	1413
38	342	78	702	118	1062	158	1422
39	351	79	711	119	1071	159	1431
40	360	80	720	120	1080	160	1440

60 *A TABLE to reduce FEET to YARDS.*

<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>
161	1449	201	1809	241	2169	281	2529
162	1458	202	1818	242	2178	282	2538
163	1467	203	1827	243	2187	283	2547
164	1476	204	1836	244	2196	284	2556
165	1485	205	1845	245	2205	285	2565
166	1494	206	1854	246	2214	286	2574
167	1503	207	1863	247	2223	287	2583
168	1512	208	1872	248	2232	288	2592
169	1521	209	1881	249	2241	289	2601
170	1530	210	1890	250	2250	290	2610
171	1539	211	1899	251	2259	291	2619
172	1548	212	1908	252	2268	292	2628
173	1557	213	1917	253	2277	293	2637
174	1566	214	1926	254	2286	294	2646
175	1575	215	1935	255	2295	295	2655
176	1584	216	1944	256	2304	296	2664
177	1593	217	1953	257	2313	297	2673
178	1602	218	1962	258	2322	298	2682
179	1611	219	1971	259	2331	299	2691
180	1620	220	1980	260	2340	300	2700
181	1629	221	1989	261	2349	301	2709
182	1638	222	1998	262	2358	302	2718
183	1647	223	2007	263	2367	303	2727
184	1656	224	2016	264	2376	304	2736
185	1665	225	2025	265	2385	305	2745
186	1674	226	2034	266	2394	306	2754
187	1683	227	2043	267	2403	307	2763
188	1692	228	2052	268	2412	308	2772
189	1701	229	2061	269	2421	309	2781
190	1710	230	2070	270	2430	310	2790
191	1719	231	2079	271	2439	311	2799
192	1728	232	2088	272	2448	312	2808
193	1737	233	2097	273	2457	313	2817
194	1746	234	2106	274	2466	314	2826
195	1755	235	2115	275	2475	315	2835
196	1764	236	2124	276	2484	316	2844
197	1773	237	2133	277	2493	317	2853
198	1782	238	2142	278	2502	318	2862
199	1791	239	2151	279	2511	319	2871
200	1800	240	2160	280	2520	320	2880

A TABLE to reduce FEET to YARDS. 61

<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>
321	2889	361	3249	401	3609	441	3969
322	2898	362	3258	402	3618	442	3978
323	2907	363	3267	403	3627	443	3987
324	2916	364	3276	404	3636	444	3996
325	2925	365	3285	405	3645	445	4005
326	2934	366	3294	406	3654	446	4014
327	2943	367	3303	407	3663	447	4023
328	2952	368	3312	408	3672	448	4032
329	2961	369	3321	409	3681	449	4041
330	2970	370	3330	410	3690	450	4050
331	2979	371	3339	411	3699	451	4059
332	2988	372	3348	412	3708	452	4068
333	2997	373	3357	413	3717	453	4077
334	3006	374	3366	414	3726	454	4086
335	3015	375	3375	415	3735	455	4095
336	3024	376	3384	416	3744	456	4104
337	3033	377	3393	417	3753	457	4113
338	3042	378	3402	418	3762	458	4122
339	3051	379	3411	419	3771	459	4131
340	3060	380	3420	420	3780	460	4140
341	3069	381	3429	421	3789	461	4149
342	3078	382	3438	422	3798	462	4158
343	3087	383	3447	423	3807	463	4167
344	3096	384	3456	424	3816	464	4176
345	3105	385	3465	425	3825	465	4185
346	3114	386	3474	426	3834	466	4194
347	3123	387	3483	427	3843	467	4203
348	3132	388	3492	428	3852	468	4212
349	3141	389	3501	429	3861	469	4221
350	3150	390	3510	430	3870	470	4230
351	3159	391	3519	431	3879	471	4239
352	3168	392	3528	432	3888	472	4248
353	3177	393	3537	433	3897	473	4257
354	3186	394	3546	434	3906	474	4266
355	3195	395	3555	435	3915	475	4275
356	3204	396	3564	436	3924	476	4284
357	3213	397	3573	437	3933	477	4293
358	3222	398	3582	438	3942	478	4302
359	3231	399	3591	439	3951	479	4311
360	3240	400	3600	440	3960	480	4320

62 *TABLE to reduce FEET to YARDS.*

<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>
481	4329	521	4689	561	5049	601	5409
482	4338	522	4698	562	5058	602	5418
483	4347	523	4707	563	5067	603	5427
484	4356	524	4716	564	5076	604	5436
485	4365	525	4725	565	5085	605	5445
486	4374	526	4734	566	5094	606	5454
487	4383	527	4743	567	5103	607	5463
488	4392	528	4752	568	5112	608	5472
489	4401	529	4761	569	5121	609	5481
490	4410	530	4770	570	5130	610	5490
491	4419	531	4779	571	5139	611	5499
492	4428	532	4788	572	5148	612	5508
493	4437	533	4797	573	5157	613	5517
494	4446	534	4806	574	5166	614	5526
495	4455	535	4815	575	5175	615	5535
496	4464	536	4824	576	5184	616	5544
497	4473	537	4833	577	5193	617	5553
498	4482	538	4842	578	5202	618	5562
499	4491	539	4851	579	5211	619	5571
500	4500	540	4860	580	5220	620	5580
501	4509	541	4869	581	5229	621	5589
502	4518	542	4878	582	5238	622	5598
503	4527	543	4887	583	5247	623	5607
504	4536	544	4896	584	5256	624	5616
505	4545	545	4905	585	5265	625	5625
506	4554	546	4914	586	5274	626	5634
507	4563	547	4923	587	5283	627	5643
508	4572	548	4932	588	5292	628	5652
509	4581	549	4941	589	5301	629	5661
510	4590	550	4950	590	5310	630	5670
511	4599	551	4959	591	5319	631	5679
512	4608	552	4968	592	5328	632	5688
513	4617	553	4977	593	5337	633	5697
514	4626	554	4986	594	5346	634	5706
515	4635	555	4995	595	5355	635	5715
516	4644	556	5004	596	5364	636	5724
517	4653	557	5013	597	5373	637	5733
518	4662	558	5022	598	5382	638	5742
519	4671	559	5031	599	5391	639	5751
520	4680	560	5040	600	5400	640	5760

A TABLE to reduce FEET to YARDS. 63

<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>
641	5769	681	6129	721	6489	761	6849
642	5778	682	6138	722	6498	762	6858
643	5787	683	6147	723	6507	763	6867
644	5796	684	6156	724	6516	764	6876
645	5805	685	6165	725	6525	765	6885
646	5814	686	6174	726	6534	766	6894
647	5823	687	6183	727	6543	767	6903
648	5832	688	6192	728	6552	768	6912
649	5841	689	6201	729	6561	769	6921
650	5850	690	6210	730	6570	770	6930
651	5859	691	6219	731	6579	771	6939
652	5868	692	6228	732	6588	772	6948
653	5877	693	6237	733	6597	773	6957
654	5886	694	6246	734	6606	774	6966
655	5895	695	6255	735	6615	775	6975
656	5904	696	6264	736	6624	776	6984
657	5913	697	6273	737	6633	777	6993
658	5922	698	6282	738	6642	778	7002
659	5931	699	6291	739	6651	779	7011
660	5940	700	6300	740	6660	780	7020
661	5949	701	6309	741	6669	781	7029
661	5958	702	6318	742	6678	782	7038
663	5967	703	6327	743	6687	783	7047
664	5976	704	6336	744	6696	784	7056
665	5985	705	6345	745	6705	785	7065
666	5994	706	6354	746	6714	786	7074
667	6003	707	6363	747	6723	787	7083
668	6012	708	6372	748	6732	788	7092
669	6021	709	6381	749	6741	789	7101
670	6030	710	6390	750	6750	790	7110
671	6039	711	6399	751	6759	791	7119
672	6048	712	6408	752	6768	792	7128
673	6057	713	6417	753	6777	793	7137
674	6066	714	6426	754	6786	794	7146
675	6075	715	6435	755	6795	795	7155
676	6084	716	6444	756	6804	796	7164
677	6093	717	6453	757	6813	797	7173
678	6102	718	6462	758	6822	798	7182
679	6111	719	6471	759	6831	799	7191
680	6120	720	6480	760	6840	800	7200

64 *A TABLE to reduce FEET to YARDS.*

<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>	<i>Yards.</i>	<i>Feet.</i>
801	7209	831	7479	861	7749	891	8019
802	7218	832	7488	862	7758	892	8028
803	7227	833	7497	863	7767	893	8037
804	7236	834	7506	864	7776	894	8046
805	7245	835	7515	865	7785	895	8055
806	7254	836	7524	866	7794	896	8064
807	7263	837	7533	867	7803	897	8073
808	7272	838	7542	868	7812	898	8082
809	7281	839	7551	869	7821	899	8091
810	7290	840	7560	870	7830	900	8100
811	7299	841	7569	871	7839		
812	7308	842	7578	872	7848		
813	7317	843	7587	873	7857		
814	7326	844	7596	874	7866		
815	7335	845	7605	875	7875		
816	7344	846	7614	876	7884		
817	7353	847	7623	877	7893		
818	7362	848	7632	878	7902		
819	7371	849	7641	879	7911		
820	7380	850	7650	880	7920		
821	7389	851	7659	881	7929		
822	7398	852	7668	882	7938		
823	7407	853	7677	883	7947		
824	7416	854	7686	884	7956		
825	7425	855	7695	885	7965		
826	7434	856	7704	886	7974		
827	7443	857	7713	887	7983		
828	7452	858	7722	888	7992		
829	7461	859	7731	889	8001		
830	7470	860	7740	890	8010		



